FEDERAL ITEM IDENTIFICATION GUIDE

MAGNETIC AMPLIFIERS, COILS, REACTORS, SUPPRESSORS, AND TRANSFORMERS

This Reprint replaces FIIG A058B, dated November 7, 2008.

Commander

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BY ORDER OF THE DIRECTOR

/s/

Commander

Defense Logistics Information Service

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GENERAL INFORMATION

1. Purpose and Scope

This Federal Item Identification Guide (FIIG) is a self-contained document for the collection, coding, transmittal, and retrieval of item characteristics and related supply management data for an item of supply for logistical use. This FIIG is to be used to describe items of supply identified by the index of approved item names appearing in this section.

2. Contents

This FIIG is comprised of the following:

Index of Approved Item Names Covered by this FIIG
Applicability Key Index
Section I - Item Characteristics Data Requirements
Section III - New text that should be here.
Appendix A - Reply Tables
Appendix B - Reference Drawing Groups (as applicable)
Appendix C - Technical Data Tables (as applicable)

a. Index of Approved Item Names Covered by this FIIG:

The index lists the approved item names with definitions and item name codes as they appear in Cataloging Handbook H6, applicable to this FIIG. In addition, each name entry is assigned an applicability key for use in relating the characteristics requirements in Section I to the specific item name.

b. Applicability Key Index:

The purpose of this index is to provide the user with a ready reference for determining the specific requirements which are applicable to a given approved item name. This index lists all requirements in sequence as they appear in the FIIG. The applicability of a Master Requirement Coded requirement is indicated by the column headed by the specific item name applicability key as follows:

(1) The letter "X" indicates the requirement must be answered for a full descriptive item.

(2) The letters "AR" indicate the requirement is to be answered as required by (1) instructional notes within the FIIG; (2) when the reply is predicated on replies to a related main requirement; or (3) when an asterisk (*) is used in conjunction with the applicability key column in Section I.

(3) A blank in the column indicates the requirement is not applicable to the specific item name.

c. Section I - Item Characteristics Data Requirements:

This section contains the physical and performance characteristics requirements needed to describe and identify an item of supply. These characteristics differentiate one item from all other items of supply and are to be used to meet the needs of all supported functions. This section is arranged in columns. Identification of each column and instructions pertinent thereto are as follows:

(1) Applicability Key:

The first column shows the applicability key(s) for each requirement. It indicates whether the requirement need be satisfied for the item being identified. "ALL" indicates that the requirement must be answered for all items covered by the FIIG. One or more alphabetic character(s) or group of one or more alphabetic characters indicates a response is required when describing items with an approved item name or names represented by the key(s). An asterisk (*) used in conjunction with any applicability key indicates that the characteristic stated in the requirement may not be applicable to all items covered by the FIIG.

(2) Master Requirement Codes (MRC):

A four-position code which is assigned to a FIIG requirement for identification of the requirement, cross-referencing requirements in the various sections and appendices of the FIIG, and for mechanized processing and retrieval of FIIG generated data. Absence of a MRC for a requirement indicates a lead-in to requirements with individual MRCs in Appendix B.

(a) The coding technique for providing MULTIPLE/OPTIONAL responses will not be used for a Section I requirement assigned Mode Code A or L that leads to Appendix B sketches with dimensional requirements.

(b) Identified Secondary Address Coding:

This technique is for extending the Master Requirement Code so that a unique address is provided for each application of the requirement in relation to the item and is authorized only as instructed within the requirement. Responses coded through this technique will always consist of the following: (1) Master Requirement Codes, (2) indicator code (a single numeric character determined by the number of positions contained), (3) identified secondary address code (1 to 3-digit alphabetic codes determined by the number of predicted replies), (4) the mode code, (5) the reply code and/or clear text response, and (6) end with a record separator (*). Steps (1) through (6) are repeated for each application of the requirement.

(c) AND/OR coding:

A technique for extending the Master Requirement Code to provide a distinctive address for multiple responses to the same requirement. Responses coded through this technique will always consist of (1) Master Requirement Code, (2) mode code, (3) the response or reply code (as instructed by the requirement), (4) a single dollar sign ($) for an OR condition, or a double dollar sign ($$) for an AND condition, (5) the mode code, (6) the response or reply code

(followed by conditions (4) through (6) for each of the multiple responses) and (7) end with a record separator (*). NOTE: Apply this technique only when instructed by the requirement sample reply (e.g.).

(3) Mode Code:

A one-position alphabetic code that specifies the manner in which a response will be prepared. Each requirement assigned a MRC is also assigned a mode code. Sample replies follow each FIIG requirement displaying the proper construction of a response for the assigned mode code. The response to a requirement will always be prepared in accordance with the assigned mode code and sample reply except in the following instances:

(a) Use of E Mode Code replies is not authorized. If a reply needed to describe an item is not listed in the applicable table, contact the FIIG Initiator.

(b) Mode Code K may not be used for any requirement unless instructed by the requirement instructions.

(4) Requirement:

This portion includes the characteristics data elements and data use identifiers required to identify and differentiate one item of supply from another, narrative definitions, and explanations as to use and method of expression. Instructions for coding and preparing replies are also provided.

(5) Reply Code:

A code that represents an established authorized reply to a requirement.

d. Section III - Supplementary Technical and Supply Management Data:

This section includes those characteristics requirements necessary to support specific logistics functions other than National Stock Number assignment.

e. Appendix A - Reply Tables:

Tables of authorized replies to requirements and reply codes when the tables are too lengthy for inclusion in Section I/III, when applicable.

f. Appendix B - Reference Drawings:

This appendix contains representative illustrations which portray specific variations of one or more generic characteristics. If reference drawings contain requirements pages to be used in conjunction with illustrations for dimensioning purposes, the requirements pages will contain Master Requirement Codes, mode codes, and a statement of the requirement. A response to requirements on a requirements page is necessary only for those Master Requirement Codes applicable to the illustration selected.

g. Appendix C - Technical Data Tables:

This appendix contains conversion charts and similar data pertinent to the requirements in Section I/III, when applicable.

3. Enter administrative MRC CLQL immediately following the last FIIG requirement reply, as instructed below:

MRC	Mode Code	Requirement	Example
CLQL	G	COLLOQUIAL NAME (common usage name by which an item is known)	CLQLGWOVEN WIRE CLOTH*

4. Special Instructions and Indicator Definitions

a. Measurements:

Unless otherwise indicated within a requirement example, enter all measurements in decimal form, carried to the nearest three decimal places, with a minimum of one digit preceding the decimal. For SI (metric), enter all measurements with a minimum of one digit before and after the decimal. For fraction to decimal conversion, see Appendix C.

b. Indicators:

A cross hatch (#) following an AIN, MRC, Reply Code or Drawing Number indicates for "ALL EXCEPT USA" use only.

5. Indexes

a. Index of Data Requirements

This index is arranged in alphabetic sequence by Master Requirement Code, cross-referenced to the applicable data requirement and page number(s).

b. Index of Approved Item Names

This index is arranged in alphabetic sequence referenced to Applicability Key.

c. Applicability Key Index

This index is arranged in Applicability Key Sequence.

6. Maintenance

Requests for revisions and other changes will be directed to:

Index of Master Requirement Codes

INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG

Approved Item Name	INC	App Key
AMPLIFIER, MAGNETIC	16193	U

An item consisting of a saturable reactor which is specially designed to be used in conjunction with a rectifier(s) for amplification purposes. The rectifier(s) may or may not be an integral part of the item of supply. The item may include resistors, capacitors, and/or other electrical components.

COIL ASSEMBLY, ELECTRICAL	36167	Q

Two or more COIL, ELECTRICAL on a common mounting or mounted on each other. Excludes items inductively coupled. For items inductively coupled, see TRANSFORMER (as modified).

COIL ASSEMBLY, RADIO FREQUENCY	00345	R

Two or more coils on a common mounting or mounted on each other. Excludes items inductively coupled.

COIL, ELECTRICAL	32494	A

An item generally consisting of one or more turns of wire or similar conductive material (in special cases it may be considered as a partial turn). It is specifically designed to concentrate magnetic flux generated by the flow of an electric current, to induce in itself an electromotive force, and to add or subtract inductive reactance in a circuit. It may include tuning devices, integral resistors and capacitors; however, excludes FILTER (as modified). For coils wound on resistors which are designed to be inserted into the circuit of a radio frequency stage to suppress high frequency parasitic oscillations, see SUPPRESSOR, PARASITIC.

COIL, RADIO FREQUENCY	06338	B

An item consisting of a partial turn or one or more turns of wire or other conductive material which constitutes one continuous untapped winding. It may be wound or formed in other than a circular manner and may be self-supporting, requiring no coil form. It is specifically designed to furnish inductive reactance in a circuit carrying radio frequency current ranging from 20 kilohertz (kilocycles) and above. It may include tuning devices, integral resistors and capacitors; however, excludes FILTER (as modified). The coil has only two electrical terminals. For items having tapped winding or more than one winding - see TRANSFORMER, RADIO FREQUENCY. For coils wound on resistors, which are designed to be inserted in the circuit of a radio frequency stage to suppress high frequency parasitic oscillations, see SUPPRESSOR, PARASITIC.

COIL, TELEPHONE	32495	C

An item consisting of one or more turns of wire or similar conductive material. It is specifically designed for use in telephone circuitry for reducing cross talk by balancing capacitances, or impedance matching or providing inductive reactance for overcoming inherent capacitance, or inductive coupling where direct coupling is undesirable or discriminating against the flow of alternating current in favor of direct current.

Approved Item Name	INC	App Key

REACTOR 00724 D

A coil or coils usually constructed with cores having low magnetic reluctance, whose primary purpose is to furnish an inductive impedance in power or audio frequency circuit ranging from zero to 20 kilohertz (kilocycles). Includes audio frequency and power filter chokes, audio reactors and swinging chokes. Does not include transformers or coils used above audio frequency range. Excludes SATURABLE REACTOR. For reactors with air cores, see COIL (as modified).

REACTOR-TRANSFORMER 02918 S

A component consisting of two or more electrically distinct items. One or more items are made of one or more coils which function as a reactor; at least one other item is made of a trapped coil or two or more coils which function as a transformer. The items may have a common core, but are not magnetically coupled.

SATURABLE REACTOR 16192 U

An item whose inductance value is controlled by electrical means. It depends on the actions of the electromagnetic flux produced by the control winding upon the effective permeability of the core. It contains two or more windings, at least one of which must be a control winding. For items designed to be used in conjunction with a rectifier(s) for amplification purposes, see AMPLIFIER, MAGNETIC.

SUPPRESSOR, PARASITIC 04440 E

An item consisting of an inductance and a resistance normally in parallel. The inductance is usually wound around the resistor. Half of the turns may be wound to inductively oppose the other half. It is designed to be inserted in the circuit of a radio frequency stage to suppress high frequency parasitic oscillations. For items designed to widen the band width, or amplify a portion of the band in an amplifier circuit, see COIL, RADIO FREQUENCY.

Transformer

1. (Electrical) A device which by electromagnetic induction transfers electrical energy from one or more circuits to one or more other circuits at the same frequency, usually with changed values of voltage and current. The item has no continuously moving parts. Excludes INDUCTANCE STANDARD (as modified).

TRANSFORMER ASSEMBLY 00449 T

Two or more separable TRANSFORMER (as modified) on a common mounting or mounted on each other.

TRANSFORMER (1), AUDIO FREQUENCY 00780 F

A transformer which is designed so that part or all of its range of operating frequencies is 20 kilohertz (kilocycles) and below. The maximum value may extend into the radio frequency range. It is generally used in the input, output, amplifier, or oscillator stages of audio and sonar devices.

TRANSFORMER, CURRENT 00738 G

An item consisting of one or more windings, designed to be placed near or connected in series with an alternating current power line to measure the current passing through the line by means of a meter; or to control the current passing through the line by means of a control device. Excludes TRANSFORMER, POWER, CURRENT REGULATING.

Approved Item Name	INC	App Key
TRANSFORMER (1), DISCRIMINATOR	16229	H

A transformer designed to be used in a stage where frequency modulation signals are converted directly to audio frequency signals or in a stage where frequency changes are converted to corresponding voltage changes. May include capacitors, resistors, and/or coils as integral parts.

TRANSFORMER (1), POTENTIAL	00479	K

A transformer designed to connect an electrical instrument to a power line or other high potential alternating current source for the purpose of voltage measurement or control.

TRANSFORMER (1), POWER	32496	J

A transformer consisting of one or more primary winding(s) and one or more secondary winding(s). It may be designed for direct connection to an alternating current source for purposes of changing the secondary volts and amperes or designed to eliminate metallic interconnection between circuits in an overall one to one voltage ratio, with or without additional output windings, or items designed to automatically maintain a constant output voltage within specified limits under varying input or load conditions. Also, includes items having a provision for mechanically changing the turns ratio or inductive coupling in progressive increments by means of voltage taps, ratio adjuster, or devices of similar design. For transformers having winding(s) common to both input and output circuits, see TRANSFORMER (1), POWER, AUTOTRANSFORMER. Excludes TRANSFORMER (1), PULSE.

TRANSFORMER (1), POWER AUTOTRANSFORMER	36166	M

A transformer which incorporates the primary and secondary functions into a single winding, which is common to both input and output circuits, and is designed to change the relationship of volts and amperes between the entire winding and its taps. Includes multiple winding transformers of like design and items in which a variation of the turns ratio or inductive ratio of inductive coupling is accomplished by connection to fixed terminals. Also, includes items having a provision for mechanically changing the turns ratio in progressive increments, by means of a shaft, voltage taps, ratio adjuster, or devices of similar design. Excludes TRANSFORMER (1), POWER; TRANSFORMER (1), PULSE.

TRANSFORMER (1), POWER, VIBRATOR	00784	N

A transformer consisting of two or more windings designed for use with a vibrator for stepping up or down pulsating direct current voltages. May also have provisions for alternating current input voltages. Excludes TRANSFORMER, PULSE.

TRANSFORMER (1), PULSE	00208	P

A transformer designed to transfer pulses of nonsinusoidal wave forms between circuits without basically changing the wave forms.

Approved Item Name	INC	App Key
TRANSFORMER, RADIO FREQUENCY	00777	L

An item having either a single tapped winding (autotransformer type), or two or more windings designed to furnish inductive reactance and/or transfer electrical energy in circuits by means of a magnetic field. It is so designed that its entire intended range of operation is above 20 kilohertz (kilocycles). The minimum value may extend into the audio frequency range (below 20 kilohertz). It may include integral capacitors, coils, resistors, and adjustable tuning cores. For items having only two active terminals see COIL, RADIO FREQUENCY. Includes types having windings which may be moved with respect to each other. Excludes TRANSFORMER DISCRIMINATOR.

APPLICABILITY KEY INDEX

	A	B	C	D	E	F	G	H	J	K
NAME	X	X	X	X	X	X	X	X	X	X
TTQY	X	X	X	X	X	X	X	X	X	X
BKPL	X	X	X	X	X					
ABHY	AR	AR	AR	AR	AR					
CQPZ	AR	AR	AR	AR	AR					
CWJS	AR						AR		X	X
CRBZ	AR	AR	AR	AR		AR	AR		AR	
CRGS	AR	AR	AR	AR						
ACYV	AR	AR		AR	AR					
CRHJ		AR								
ACYW				AR		AR				
CRMJ							AR		AR	AR
ACZB	AR			AR		X	X	X	X	X
ACZF						AR	AR		AR	
ACZH						AR				AR
ACZP		AR			AR					
AAPP					AR					
ACZQ					AR					
ACZR	AR	AR								
CTHD		AR						AR	AR	
ACZU		AR						AR	AR	
ACZX						AR	AR	AR	AR	AR
BPLC						X	AR	X	AR	X
ACZC							AR		AR	
AKDX	X		X	X	X					
ACYF				AR						
AXGY	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AKPV	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABTB	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABTD	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AFHM	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
THSD	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CQJX	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CMLP	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AEJN	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABKQ	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABKR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CSQJ	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CQKH	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AFFL	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AKNA	X	X	X	X	X	X	X	X	X	X
ADAQ	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAU	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAT	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABHP	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAV	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABKW	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR

ABMK	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CBBL	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AARG	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AARH	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
FEAT	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
TEST	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
SPCL	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ZZZK	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ZZZT	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ZZZY	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CRTL	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
PRPY	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ENAC	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ALAX	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ELRN	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
NHCF	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ACYE						AR				
ACZD							AR		AR	
BFMF									AR	
AYTS									AR	
AFHN							AR		AR	AR
AEHZ	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
AGAV	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
BBRJ	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
PRMT	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
PMLC	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABFE	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
HZRD	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CXCY	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR

	L	M	N	P	Q	R	S	T	U
NAME	X	X	X	X	X	X	X	X	X
TTQY	X	X	X	X	X	X	X	X	X
BKPL	X				X	X	X	X	
ABHY	AR				AR	AR	AR	AR	
CQPZ	AR				AR	AR	AR	AR	
CWJS		X	X	AR	AR	AR	AR	AR	AR
CRBZ		X	X	AR	AR	AR	AR	AR	
CHTZ									AR
CRGS				AR	AR	AR	AR	AR	AR
ACYV	AR			AR	AR	AR	AR		
CRHJ						AR			
ACYW				AR				AR	
CRMJ		AR					AR	AR	AR
ACZB	AR	X	X	AR	AR		AR	AR	AR
ACZF							AR	AR	
ACZH				AR			AR	AR	
ACZN				AR				AR	
ACZP	AR					AR			
ACZR					AR	AR			
CTHD	AR	AR				AR		AR	
ACZU	AR	AR				AR		AR	
ACZX	AR	AR	AR	AR			AR	AR	AR
BPLC	X	AR	X	X			AR	AR	AR
ACZC		AR					AR	AR	
AKDX					X	X			
AXGY	AR	AR	AR	AR	AR	AR	AR	AR	AR
AKPV	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABTB	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABTD	AR	AR	AR	AR	AR	AR	AR	AR	AR
AFHM	AR	AR	AR	AR	AR	AR	AR	AR	AR
THSD	AR	AR	AR	AR	AR	AR	AR	AR	AR
CQJX	AR	AR	AR	AR	AR	AR	AR	AR	AR
CMLP	AR	AR	AR	AR	AR	AR	AR	AR	AR
AEJN	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABKQ	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABKR	AR	AR	AR	AR	AR	AR	AR	AR	AR
CSQJ	AR	AR	AR	AR	AR	AR	AR	AR	AR
CQKH	AR	AR	AR	AR	AR	AR	AR	AR	AR
AFFL	AR	AR	AR	AR	AR	AR	AR	AR	AR
AKNA	X	X	X	X	X	X	X	X	X
ADAQ	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAR	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAU	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAT	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABHP	AR	AR	AR	AR	AR	AR	AR	AR	AR
ADAV	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABKW	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABMK	AR	AR	AR	AR	AR	AR	AR	AR	AR
CBBL	AR	AR	AR	AR	AR	AR	AR	AR	AR
AARG	AR	AR	AR	AR	AR	AR	AR	AR	AR
AARH	AR	AR	AR	AR	AR	AR	AR	AR	AR
FEAT	AR	AR	AR	AR	AR	AR	AR	AR	AR
TEST	AR	AR	AR	AR	AR	AR	AR	AR	AR

SPCL	AR	AR	AR	AR	AR	AR	AR	AR	AR
ZZZK	AR	AR	AR	AR	AR	AR	AR	AR	AR
ZZZT	AR	AR	AR	AR	AR	AR	AR	AR	AR
ZZZY	AR	AR	AR	AR	AR	AR	AR	AR	AR
CRTL	AR	AR	AR	AR	AR	AR	AR	AR	AR
PRPY	AR	AR	AR	AR	AR	AR	AR	AR	AR
ENAC	AR	AR	AR	AR	AR	AR	AR	AR	AR
ALAX	AR	AR	AR	AR	AR	AR	AR	AR	AR
ELRN	AR	AR	AR	AR	AR	AR	AR	AR	AR
NHCF	AR	AR	AR	AR	AR	AR	AR	AR	AR
ACYE	AR							AR	
ACZD		AR		AR				AR	
AEHZ	AR	AR	AR	AR	AR	AR	AR	AR	AR
AGAV	AR	AR	AR	AR	AR	AR	AR	AR	AR
BBRJ	AR	AR	AR	AR	AR	AR	AR	AR	AR
PRMT	AR	AR	AR	AR	AR	AR	AR	AR	AR
PMLC	AR	AR	AR	AR	AR	AR	AR	AR	AR
ABFE	AR	AR	AR	AR	AR	AR	AR	AR	AR
HZRD	AR	AR	AR	AR	AR	AR	AR	AR	AR
CXCY	AR	AR	AR	AR	AR	AR	AR	AR	AR

SECTION I

APP Key	MRC	Mode Code	Requirements
ALL			
	NAME	D	ITEM NAME

Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.

Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED32494*)

ALL			
	TTQY	J	TERMINAL TYPE AND QUANTITY

Definition: INDICATES THE TYPE AND NUMBER OF TERMINALS FOR PROVIDING ELECTRICAL CONNECTION.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 1, followed by the quantity. (e.g., TTQYJACC1*; TTQYJADC1$$JADF2*; TTQYJAAW1$JAAY1*)

Do not include dummy terminals.

See Appendix B, Reference Drawing Group A, for illustrated terminal types.

A, B, C, D, E, L, Q, R, S, T			
	BKPL	D	RATING METHOD

Definition: THE MEANS BY WHICH THE RATING IS DETERMINED.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code and the applicable Reply Code from the table below. (e.g., BKPL3XXEDAAG*; BKPL3XXDDAAG*; BKPL3XXEDAAG$$DAAH*; BKPL3ZXADAAG*; BKPL3ZZADAAH*;

BKPL3XAADAAG*

BKPL3XBADAAH*)

REPLY CODE	REPLY (AN29)
AAG	ELECTRICAL

APP Key	MRC	Mode Code	Requirements
	AAH		WINDING TURNS

NOTE FOR MRCS ABHY AND CQPZ: IF REPLY CODE AAH IS ENTERED FOR MRC BKPL, REPLY TO MRCS ABHY AND CQPZ.

A*, B*, C*, D*, E*, L*, Q*, R*, S*, T*

ABHY A TURN QUANTITY

Definition: THE NUMBER OF TURNS OF CONDUCTIVE MATERIAL FORMING THE WINDING.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code and the numeric value. (e.g., ABHY3XXEA75*; ABHY3ZXEA80*;

ABHY3XZEA65-1/2*;

ABHY3XAEA55*

ABHY3XBEA75*)

For pi constructed coils, give the total quantity of turns included in all pies.

A*, B*, C*, D*, E*, L*, Q*, R*, S*, T* (See Note Preceding MRC ABHY)

CQPZ J WINDING CONDUCTOR SIZE

Definition: THE SIZE OF THE CONDUCTOR WHICH FORMS THE WINDING ON THE ITEM.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., CQPZ3XXEJAF0.03196*; CQPZ3XZEJLG3.50*; CQPZ3ZXEJAF0.02846*;

CQPZ3XAEJAF0.04526*

CQPZ3XBEJAF0.06408*)

See Appendix C, Table 4, for conversion of gage number to decimals.

When the conductor is composed of LITZ wire, give the size of the individual wire strand.

Table 1

APP Key	MRC	Mode Code	Requirements

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AB96)
F	AMERICAN WIRE GAGE
G	MILLIMETER WIRE GAGE
H	STANDARD WIRE GAGE

NOTE FOR MRCS: CWJS, CRBZ, CRGS, ACYV, CRHJ, ACYW, CRMJ, ACZB, ACZF, ACZH, ACZN, AAPP, AND ACZQ: IF REPLY CODE AAG HAS BEEN ENTERED FOR MRC BKPL, REPLY TO TWO OR MORE OF THE MRCS INDICATED BY AN X FOR THE RELATED APPLICABILITY KEY.

MRC	Applicability Key									
A	B	C	D	E	L	Q	R	S	T	
CWJS	X						X	X	X	X
CRBZ	X	X	X	X			X	X	X	X
CRGS	X	X	X	X			X	X	X	X
ACYV	X	X		X	X	X	X	X	X	X
CRHJ		X						X		
ACYW				X						X
CRMJ									X	X
ACZB	X			X		X			X	X
ACZF									X	X
ACZH									X	X
ACZN										X
AAPP					X					
ACZQ					X					

A*, G*, J, K, M, N, P*, Q*, R*, S*, T*, U* (See Note Above)

CWJS J WINDING OPERATING VOLTAGE

Definition: THE VALUE(S) OF THE OPERATING VOLTAGE APPLIED TO THE WINDING.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, applicable Reply Codes from Tables 1, 2, and 3 below, and the numeric value. (e.g., CWJS3XXAJBVA110.00$$JBVA115.00$$JBVA120.00*; CWJS3XXDJBKA12.60$JBKA13.30$JBKA15.00*; CWJS3XXEJCVA6.00*; CWJS3XXEJCKA2.16*;

CWJS3XAEJCVA6.00$$JCVA14.00*

CWJS3XBEJCVB115.00$$JCVC120.00*)

For pulse transformer with a secondary filament winding, enter the primary and/or secondary voltages in response to this requirement.

If tap locations are given in percent above and/or below the nominal (normal) value of the winding, convert percentage value for each to a voltage value and record all values of the winding as nominal values.

Table 1

REPLY CODE	REPLY (AB62)
B	AC
C	DC

Table 2

REPLY CODE	REPLY (AB63)
K	KILOVOLTS
M	MEGAVOLTS
L	MILLIVOLTS
V	VOLTS

Table 3

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

A*, B*, C*, D*, F*, G*, J*, M, N, P*, Q*, R*, S*, T* (See Note Preceding MRC CWJS)

CRBZ J WINDING OPERATING CURRENT

Definition: THE AMOUNT OF OPERATING CURRENT FOR WHICH THE WINDING IS DESIGNED.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, the applicable reply codes from Tables 1, 2, and 3 below, and the numeric value. (e.g.,
CRBZ3XXAJAMACB400.0$$JLAACC500.0$$JLAACC750.0*;
CRBZ3XZAJAMACC20.0$JAMACC2.5$JAMACB2.0*;
CRBZ3XXAJAMACB400.0*;

CRBZ3XADJLAACC500.0*

CRBZ3XBDJLAACC750.0*)

If the item being identified is a Reactor, with a Swinging Choke, enter the minimum and maximum rating. For all other items, enter the value as maximum.

For power transformers designed to supply voltage and current to plate circuits, enter the highest (choke input filter) DC load current rating.

For pulse transformers, with a secondary filament winding, enter the primary and/or secondary current rating in response to this requirement.

Table 1

REPLY CODE	REPLY (AN86)
AM	AMPERES
UA	MICROAMPERES
LA	MILLIAMPERES

Table 2

REPLY CODE	REPLY (AN87)
AC	AC
DC	DC

Table 3

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

U*			
	CHTZ	J	SATURATION CURRENT RATING

APP Key	MRC	Mode Code	Requirements

Definition: THE AMOUNT OF CONTROL CURRENT BEYOND WHICH AN INCREASE IN CONTROL CURRENT PRODUCES NO INCREASE IN THE ITEMS OUTPUT.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., CHTZJU35.0*)

REPLY CODE	REPLY (AC30)
A	AMPERES
U	MICROAMPERES
L	MILLIAMPERES

A*, B*, C*, D*, P*, Q*, R*, S*, T*, U* (See Note Preceding MRC CWJS)

CRGS B DC RESISTANCE RATING IN OHMS

Definition: THE OPPOSITION TO THE FLOW OF DIRECT CURRENT OFFERED BY AN ITEM, EXPRESSED IN OHMS.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, and the numeric value. (e.g., CRGS3XXAB175.000*; CRGS3XZAB125.000*;

CRGS3XAAB235.000*

CRGS3XBAB325.000*)

A*, B*, D*, E*, L*, P*, Q*, R*, S* (See Note Preceding MRC CWJS)

ACYV J INDUCTANCE RATING

Definition: THE VALUE(S) OF INDUCTANCE INHERENT IN THE ITEM.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., ACYV3XXEJHA12.00*; ACYV3XXEJHB2.30$$JHC4.50*;

ACYV3XADJUA2.50*

ACYV3XBDJUA5.00*)

For reactors, if mechanically adjustable type, give inductance range; if swinging choke type, give inductance range for the corresponding current range under MRC CRBZ.

APP Key	MRC	Mode Code	Requirements

Table 1

REPLY CODE	REPLY (AC31)
H	HENRY
U	MICROHENRIES
L	MILLIHENRIES

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

B*, R* (See Note Preceding MRC CWJS)

CRHJ J QUALITY FACTOR

Definition: THE QUALITY FACTOR OF AN ITEM WITH RESPECT TO A SPECIFIED FREQUENCY FOR THE RATED INDUCTANCE.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, the applicable Reply Code from the table below, and the numeric value. (e.g., CRHJ3XXEJB85*; CRHJ3XZEJC100*; CRHJ3XXEJB85$$JC90*;

CRHJ3XAEJB75*

CRHJ3XBEJB80*)

REPLY CODE	REPLY (AC20)
C	MAXIMUM
B	MINIMUM

D*, F*, P*, T* (See Note Preceding MRC CWJS)

ACYW J IMPEDANCE RATING IN OHMS

Definition: THE TOTAL OPPOSITION (RESISTIVE AND REACTIVE) WHICH THE ITEM OFFERS TO THE FLOW OF AN ALTERNATING CURRENT, EXPRESSED IN OHMS.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, the applicable Reply Code from the table below, and the numeric value. (e.g., ACYW3XXAJA2000.0*; ACYW3XXDJB1.3$$JC1.5*; ACYW3XZAJC3.2*;

ACYW3XADJA4.0*

ACYW3XBDJA8.0*)

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

G*, J*, K*, M*, S*, T*, U* (See Note Preceding MRC CWJS)

CRMJ J WINDING POWER RATING

Definition: THE MAXIMUM POWER FOR WHICH THE WINDING OF THE ITEM IS RATED.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 2, followed by the Mode Code, the applicable Reply Code from the table below, and the numeric value. (e.g., CRMJ3XXAJWW10.0*; CRMJ3XXDJLW75.0*; CRMJ3XZDJWW25.0*;

CRMJ3XADJWW5.0*

CRMJ3XBDJWW7.0*)

REPLY CODE	REPLY (AN86)
DB	DECIBELS
KA	KILOVOLT-AMPERES
LW	MILLIWATTS
EA	VOLTS-AMPERES
WW	WATTS

APP Key	MRC	Mode Code	Requirements

NOTE 1 FOR MRCS: ACZB, ACZF, ACZH, ACZN, ACZP, ACZR, CTHD, ACZU, ACZX, BPLC, ACZC, AND AKDX: 1. The following I/SAC special recording instructions apply to requirements that reference Appendix A, Table 3. a. For MRCs indicating Applicability Keys A, B, C, D, E, F, G, H, J, K, L, M, N, P, and U, enter I/SAC 1X. b. For MRCs indicating Applicability Keys Q, R, and T: (1) When the item has multiple identical components, enter I/SAC 1Z. (2) When the item has multiple nonidentical components, enter I/SAC 1A through 1H, as applicable. c. For MRCs indicating Applicability Key S: (1) For recording reactor data, use I/SAC 1A. (2) For recording transformer data, use I/SAC 1B. 2. To establish the priority sequence for determining the first component, see paragraph 2 of Note 1 . The first reply selected in the order given for the specified MRC would be I/SAC Reply Code 1A. The same procedure will be used to determine the second I/SAC Reply Code 1B and each succeeding component. If the priority sequence has not been established by Note 1, use the following procedure to determine first, second, and succeeding component. a. MRC ACZB, ascending numeric sequence. b. MRC ACZF, Reply Code sequence. c. MRC ACZF, ascending numeric sequence. d. MRC ACZH, ascending numeric sequence. e. MRC ACZN, Reply Code sequence. f. MRC ACZN, ascending numeric sequence. g. MRC ACZP, Reply Code sequence. h. MRC ACZR, Reply Code sequence. i. MRC CTHD, Reply Code sequence. j. MRC ACZU, Reply Code sequence. k. MRC ACZX, Appendix A, Table 3, Reply Code sequence. l. MRC BPLC, Reply Code sequence. m. MRC BPLC, ascending numeric sequence. n. MRC ACZC, Appendix A, Table 3, Reply Code sequence. o. MRC AKDX, ascending numeric sequence.

NOTE 2 FOR MRC ACZB: IF BOTH RANGE AND PEAK FREQUENCIES ARE GIVEN IN SOURCE DATA, RECORD PEAK FREQUENCY FOR DISCRIMINATOR TRANSFORMER; AND RECORD FREQUENCY RANGE FOR AUDIO FREQUENCY AND RADIO FREQUENCY TRANSFORMERS.

A*, D*, F, G, H, J, K, L*, M, N, P*, Q*, S*, T*, U* (See Notes Above and Preceding MRC CWJS)

ACZB J FREQUENCY RATING

Definition: THE NUMBER OF COMPLETE CYCLIC CHANGES, PER UNIT OF TIME, FOR WHICH AN ITEM IS RATED.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., ACZB1XJKB350.0$$JMC1.2*; ACZB1ZJEA60.0*;

ACZB1AJEA60.0*

ACZB1BJEA400.0*)

APP Key	MRC	Mode Code	Requirements

For items designed to operate in 50/60 hertz systems, enter both values, as nominal, using OR ($) coding. (e.g., ACZB1XJEA50.0$JEA60.0*)

Table 1

REPLY CODE	REPLY (AC32)
E	HERTZ
K	KILOHERTZ
M	MEGAHERTZ

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

F*, G*, J*, S*, T* (See Notes Preceding MRCs CWJS and ACZB)

ACZF J MAXIMUM TRANSFORMER POWER RATING

Definition: THE MAXIMUM AMOUNT OF POWER FOR WHICH THE TRANSFORMER IS RATED.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, the applicable Reply Code from the table below, and the numeric value. (e.g., ACZF1XJD15.0*; ACZF1ZJM10.0*;

ACZF1AJM20.0*

ACZF1BJM100.0*)

For plate coupling, modulation, or line type audio frequency transformers, record the maximum audio operating level under this requirement.

REPLY CODE	REPLY (AC33)
D	DECIBELS
K	KILOVOLT-AMPERES
M	MILLIWATTS
E	VOLTS-AMPERES
W	WATTS

F*, K*, P*, S*, T* (See Notes Preceding MRCs CWJS and ACZB)

ACZH A PRIMARY TO SECONDARY TURN RATIO

APP Key	MRC	Mode Code	Requirements

Definition: THE RATIO OF THE NUMBER OF TURNS IN A PRIMARY WINDING TO THE NUMBER OF TURNS IN THE SECONDARY WINDING OF A TRANSFORMER.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code and the numeric value.

(e.g., ACZH1XA1 TO 3*;

ACZH1XA1-1/2 TO 2*;

ACZH1ZA1-3/4 TO 3*;

ACZH1AA1 TO 2*;

ACZH1BA1-1/4 TO 2*)

Record the turns ratio as it is reflected in the source document, except that in lieu of colons, e.g., 1:1:1, use the word TO, 1 TO 1 TO 1.

P*, T* (See Notes Preceding MRCs CWJS and ACZB)

ACZN J PULSE REPETITION RATE

Definition: THE AVERAGE RATE AT WHICH THE PULSES RECUR WITHIN A SPECIFIED TIME INTERVAL.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, the applicable Reply Code from the table below, and the numeric value. (e.g., ACZN1XJK240.0*; ACZN1ZJK150.0*;

ACZN1AJK125.0*

ACZN1BJK175.0*)

If the source document specifies a value in pulses per second (pps) for this characteristic, enter the value in Hertz.

REPLY CODE	REPLY (AC32)
E	HERTZ
K	KILOHERTZ
M	MEGAHERTZ

B*, E*, L*, R* (See Notes Preceding MRC ACZB)

APP Key	MRC	Mode Code	Requirements
	ACZP	D	COIL FORM TYPE

Definition: INDICATES THE TYPE OF SUPPORT ON WHICH THE COIL IS WOUND.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code and the applicable Reply Code from the table below. (e.g., ACZP1XDE*; ACZP1ZDB*;

ACZP1ADE*

ACZP1BDC*)

If the item is air wound (having no form, or wound on spacing or supporting strips and was previously recorded as not applicable on source documents, enter Reply Code E for this requirement.

If the item being identified is a parasitic suppressor and the coil is wound on a resistor, enter Reply Code D for this requirement.

If the item is wound on a form which has an open interior, enter Reply Code B for this requirement.

If the item is wound on a form which has a solid interior other than a resistor, enter Reply Code C for this requirement. Also include toroid (donut shaped) forms.

REPLY CODE	REPLY (AC12)
E	AIR WOUND (consists of winding only, no form)
B	HOLLOW (consists of winding with form, which is hollow)
D	RESISTOR
C	SOLID

E* (See Note Preceding MRC CWJS)

	AAPP	J	ELECTRICAL RESISTANCE

Definition: A MEASURE OF THE OPPOSITION TO THE FLOW OF ELECTRICAL CURRENT.

Reply Instructions: Enter the applicable Reply Code for the resistor rating from the table below, followed by the numeric value. (e.g., AAPPJQ250.0*)

APP Key	MRC	Mode Code	Requirements

REPLY CODE	REPLY (AA57)
G	GIGOHMS
K	KILOHMS
M	MEGOHMS
Q	OHMS

E* (See Note Preceding MRC CWJS)

ACZQ B RESISTOR POWER DISSIPATION RATING IN WATTS

Definition: THE MAXIMUM AMOUNT OF ELECTRICAL ENERGY THAT CAN BE EXPENDED BY A RESISTOR, EXPRESSED IN WATTS.

Reply Instructions: Enter the numeric value. (e.g., ACZQB0.125*)

A*, B*, Q*, R* (See Note Preceding MRC ACZB)

ACZR D CORE CONSTRUCTION

Definition: THE DESIGNATION DESCRIBING THE METHOD USED IN FORMING THE CORE.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code and the applicable Reply Code from the table below. (e.g., ACZR1XDL*; ACZR1ZDS*;

ACZR1ADL*

ACZR1BDP*)

REPLY CODE	REPLY (AC13)
L	LAMINATED (built up from sheet iron or steel laminations which are insulated from each other)
P	POWDERED (consists of fine particles of magnetic material mixed with bonding material and pressed into shape)
S	SOLID (state of magnetic material which has definite shape and volume)

B*, H*, J*, L*, M*, R*, T* (See Note Preceding MRC ACZB)

CTHD J ADJUSTMENT METHOD AND QUANTITY

APP Key	MRC	Mode Code	Requirements

Definition: THE MEANS PROVIDED AND NUMBER OF ADJUSTMENTS INCLUDED ON THE ITEM.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, the applicable Reply Code from the table below, and the quantity. (e.g., CTHD1XJADT2*; CTHD1XJADT2$$JADW2*; CTHD1ZJADY2*;

CTHD1AJADT1*

CTHD1BJADW2*)

REPLY CODE	REPLY (AL41)
ADT	ADJUSTABLE CAPACITOR
ADY	ADJUSTABLE CONTROL (for power transformers only)
ADW	ADJUSTABLE CORE
ADX	ADJUSTABLE CUP

B*, H*, J*, L*, M*, R*, T* (See Note Preceding MRC ACZB)

ACZU D ADJUSTMENT DEVICE DRIVE TYPE

Definition: INDICATES THE TYPE OF DRIVE PROVIDED FOR THE ADJUSTMENT DEVICE.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, and the applicable Reply Code from the table below. (e.g., ACZU1XDAAF*; ACZU1ZDAAN*;

ACZU1ADAAN*

ACZU1BDAAB*)

REPLY CODE	REPLY (AE10)
AAQ	DOUBLE FLATTED SCREW
AAR	DOUBLE FLATTED SHAFT Hex Hole (use Reply Code AAN)
AAG	HEX NUT
AAN	HEX SOCKET Internal Hex Wrench (use Reply Code AAN)
AAC	LEVER
ABA	SCREW W/FLATTED END
AAB	SHAFT
AAF	SLOTTED SCREW

APP Key	MRC	Mode Code	Requirements

F*, G*, H*, J*, K*, L*, M*, N*, P*, S*, T*, U* (See Note 1 Preceding MRC ACZB)

ACZX D WINDING SHIELDING METHOD

Definition: THE MEANS BY WHICH A PROTECTIVE METAL SCREEN, PLATE, OR INCLOSURE IS PLACED AROUND OR BETWEEN THE WINDINGS OF AN ITEM TO PREVENT ELECTROSTATIC OR MAGNETIC COUPLING.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, and the applicable Reply Code from Appendix A, Table 8. (e.g., ACZX1XDAB*; ACZX1XDAB$$DBR*; ACZX1ZDAZ*;

ACZX1ADAT*

ACZX1BDAB*)

NOTE FOR MRC BPLC: REPLY CODES H AND J ARE APPLICABLE ONLY TO APPLICABILITY KEYS L, M, S, AND APPLICABILITY KEY T ASSEMBLIES WHICH INCLUDE AUTOTRANSFORMERS.

F, G*, H, J*, K, L, M*, N, P, S*, T*, U* (See Notes Above and Preceding MRC ACZB)

BPLC J WINDING FUNCTION AND QUANTITY

Definition: THE PURPOSE AND THE TOTAL NUMBER OF INDIVIDUAL (NOT ELECTRICALLY CONNECTED) WINDINGS DESIGNED TO PERFORM IN A TRANSFORMER.

Reply Instructions: Enter the applciable I/SAC from Appendix A , Table 3, followed by the Mode Code, the applicable Reply Code from the table below, and the numeric value. Identify the primary (input; source) winding first, followed by the secondary (output, load) winding, using AND ($$) coding. (e.g., BPLC1XJC1$$JE1*; BPLC1XJH1*)

REPLY CODE	REPLY (AC03)
G	CONTROL (includes bias)
C	PRIMARY
H	PRIMARY, FIXED AUTOTRANSFORMER TYPE
J	PRIMARY, VARIABLE AUTOTRANSFORMER TYPE
E	SECONDARY
F	TERTIARY

APP Key	MRC	Mode Code	Requirements

G*, J*, M*, S*, T* (See Note Preceding MRC ACZB)

ACZC D INPUT-OUTPUT PHASE RELATIONSHIP

Definition: THE RELATIONSHIP OF THE PHASE INPUT TO THE PHASE OUTPUT OF AN ALTERNATING CURRENT.

Reply Instructions: Enter the applicable ISAC from Appendix A , Table 3, followed by the Mode Code and the applicable Reply Code from Appendix A, Table 7. (e.g., ACZC1XDC*; ACZC1ZDB*; ACZC1XDB$$DC*;

ACZC1ADB*

ACZC1BDC*)

A, C, D, E, Q, R (See Note Preceding MRC ACZB)

AKDX A WINDING QUANTITY

Definition: THE NUMBER OF INDIVIDUAL (NOT ELECTRICALLY CONNECTED) WINDINGS.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 3, followed by the Mode Code, and the quantity. (e.g., AKDX1XA4*; AKDX1ZA2*;

AKDX1AA1*

AKDX1BA2*)

D*

ACYF D INDUCTANCE TYPE

Definition: INDICATES THE TYPE OF INDUCTANCE INCLUDED ON THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ACYFDB*; ACYFDB$$DE*)

REPLY CODE	REPLY (AC01)
B	FIXED
D	MECHANICALLY ADJUSTABLE
E	SWINGING

APP Key	MRC	Mode Code	Requirements

The following I/SAC special recording instructions apply when replying to requirements that reference Appendix A, Table 4. a. Single Mounting Facility A single mounting facility may consist of a single stud, hole, bushing, or the like or it may consist of multiple holes, studs, or the like located on a single mounting patter (see Appendix B, Reference Drawing Group B, for typical mounting patterns). If item has a single mounting facility, enter I/SAC 1X from Appendix A, Table 4. b. Multiple Identical Mounting Facilities Use I/SAC Code 1Z from Appendix A, Table 4. c. Multiple Nonidentical Mounting Facilities Use I/SAC Codes 1A through 1D as applicable, from Appendix A, Table 4. To establish the priority of sequence for determining the first mounting facility, use the following procedure. If replies to MRC AXGY are identical, proceed to MRC AKPV and so on, until the replies are different. The first reply selected in the order given below will be the first I/SAC Reply Code 1A. The same procedure will be used to determine the second I/SAC Reply Code 1B and each succeeding mounting facility. a. MRC AXGY, Reply Code sequence b. MRC AKPV, ascending numeric value c. MRC ABTB, ascending numeric value d. MRC ABTD, ascending numeric value e. MRC THSD, Reply Code sequence f. MRC CQJX, ascending numeric value g. MRC CMLP, ascending numeric value NOTE FOR MRCS AXGY, AKPV, ABTB, ABTD, THSD, CQJX AND CMLP. The following I/SAC special recording instructions apply when replying to requirements that reference Appendix A, Table 4. a. Single Mounting Facility A single mounting facility may consist of a single stud, hole, bushing, or the like or it may consist of multiple holes, studs, or the like located on a single mounting patter (see Appendix B, Reference Drawing Group B, for typical mounting patterns). If item has a single mounting facility, enter I/SAC 1X from Appendix A, Table 4. b. Multiple Identical Mounting FacilitiesUse I/SAC Code 1Z from Appendix A, Table 4. c. Multiple Nonidentical Mounting Facilities Use I/SAC Codes 1A through 1D as applicable, from Appendix A, Table 4.To establish the priority of sequence for determining the first mounting facility, use the following procedure. If replies to MRC AXGY are identical, proceed to MRC AKPV and so on, until the replies are different. The first reply selected in the order given below will be the first I/SAC Reply Code 1A. The same procedure will be used to determine the second I/SAC Reply Code 1B and each succeeding mounting facility. a. MRC AXGY, Reply Code sequence b. MRC AKPV, ascending numeric value c. MRC ABTB, ascending numeric value d. MRC ABTD, ascending numeric value e. MRC THSD, Reply Code sequence f. MRC CQJX, ascending numeric value g. MRC CMLP, ascending numeric value

ALL * (See Note Above)

AXGY D MOUNTING METHOD

Definition: THE MEANS OF ATTACHING THE ITEM.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code and the applicable Reply Code from Appendix A, Table 5. (e.g., AXGY1XDABC*; AXGY1XDAHF$$DAET*; AXGY1XDABH$DAFM*; AXGY1ZDAEC*;

AXGY1ADABC*

AXGY1BDACC*)

NOTE FOR MRC AKPV: REPLY TO THIS MRC IF REPLY CODE ABY, AHF, AET ACQ, OR AEW HAS BEEN ENTERED FOR MRC AXGY.

ALL * (See Note Above and Preceding MRC AXGY)

AKPV A MOUNTING FACILITY QUANTITY

Definition: THE NUMBER OF MOUNTING FACILITIES PROVIDED.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code and the quantity. (e.g., AKPV1XA4*; AKPV1ZA2*;

AKPV1AA1*

AKPV1BA2*)

NOTE FOR MRC ABTB: REPLY TO THIS MRC IF REPLY CODE ACQ HAS BEEN ENTERED FOR MRC AXGY.

ALL * (See Notes Above and Preceding MRC AXGY)

ABTB J MOUNTING HOLE DIAMETER

Definition: THE LENGTH OF A STRAIGHT LINE WHICH PASSES THROUGH THE CENTER OF A MOUNTING HOLE, AND TERMINATES AT THE CIRCUMFERENCE.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABTB1XJAA0.125*; ABTB1XJLA3.2*; ABTB1XJAB0.115$$JAC0.125*; ABTB1ZJAA0.250*;

ABTB1AJAA0.130*

ABTB1BJAA0.150*)

APP Key	MRC	Mode Code	Requirements

For items indicating stud diameter and/or stud size in the source document, see Appendix C, Table 3, for conversion.

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

NOTE FOR MRC ABTD: REPLY TO THIS MRC IF REPLY CODE ABY HAS BEEN ENTERED FOR MRC AXGY.

ALL * (See Note Above and Preceding MRC AXGY)

ABTD J MOUNTING SLOT WIDTH

Definition: A MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF THE MOUNTING SLOT, IN DISTINCTION FROM THICKNESS.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABTD1XJAA0.125*; ABTD1XJLA3.0*; ABTD1XJAB0.115$$JAC0.125*; ABTD1ZJAA0.250*;

ABTD1AJAA0.125*

ABTD1BJAA0.250*)

For items indicating stud diameter and/or stud size in the source document, see Appendix C, Table 3, for conversion.

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM

APP Key	MRC	Mode Code	Requirements
		C	MAXIMUM

NOTE FOR MRC AFHM: IF REPLY CODE ACC HAS BEEN ENTERED FOR MRC AXGY REPLY TO MRC AFHM.

ALL * (See Note Above)

AFHM J MOUNTING TAB WIDTH

Definition: A MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF A MOUNTING TAB, IN DISTINCTION FROM THICKNESS.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., AFHMJAA0.375*; AFHMJLA9.5*; AFHMJAB0.370$$JAC0.380*; AFHMJAA0.031$$JAA0.045*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

NOTE FOR MRC THSD: REPLY TO THIS MRC IF REPLY CODE AES, AFA, AHF, OR AET HAS BEEN ENTERED FOR MRC AXGY.

ALL * (See Note Above and Preceding MRC AXGY)

THSD D THREAD SERIES DESIGNATOR

Definition: A DESIGNATION DISTINGUISHING ONE GROUP OF THREAD DIAMETER-PITCH COMBINATIONS FROM ANOTHER BY THE NUMBER OF THREADS PER MEASUREMENT SCALE FOR A SPECIFIC DIAMETER.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code and the applicable Reply Code from the table below. (e.g., THSD1XDNE*; THSD1ZDUN*;

THSD1ADNF*

APP Key	MRC	Mode Code	Requirements

THSD1BDNS*)

REPLY CODE	REPLY (AH06)	APPLICABLE MRCS
BA	BA	CQJX
BW	BSW	CQJX
SM	ISO M	CQJX
SS	ISO S	CQJX
EM	M	CQJX
MJ	MJ	CQJX
NP	NPT	CQJX
UN	UN	CQJX, CMLP
NC	UNC	CQJX
NE	UNEF	CQJX
NF	UNF	CQJX
NJ	UNJ	CQJX, CMLP
JC	UNJC	CQJX
JE	UNJEF	CQJX
JF	UNJF	CQJX
JS	UNJS	CQJX, or CMLP
NM	UNM	CQJX or CMLP
NS	UNS	CQJX or CMLP

ALL * (See Note Preceding MRC AXGY)

CQJX J NOMINAL THREAD SIZE

Definition: A DESIGNATION THAT IS USED FOR THE PURPOSE OF GENERAL IDENTIFICATION OF THE THREAD.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code and the applicable Reply Code from the table below. (e.g., CQJX1XJA0.625*; CQJX1ZJL6.3*;

CQJX1AJA0.500*

CQJX1BJA0.625*)

See Appendix C, Table 1, for fraction to decimal conversion. See Appendix C, Table 6, for unified thread sizes. See Appendix C, Table 7, for metric sizes.

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

APP Key	MRC	Mode Code	Requirements
ALL * (See Note Preceding MRC AXGY)			
	CMLP	A	THREAD QUANTITY PER INCH

Definition: THE NUMBER OF THREADS ON THE ITEM PER LINEAR INCH MEASURED ON A LINE PARALLEL TO THE THREAD AXIS.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 4, followed by the Mode Code and the quantity. (e.g., CMLP1XA20*; CMLP1ZA28*;

CMLP1AA24*

CMLP1BA32*)

APP Key	MRC	Mode Code	Requirements
			The following I/SAC special recording instructions apply when replying to requirements that reference Appendix A, Table 6. a. Single Mounting Facility Center Group A single mounting facility center group may consist of a single group of studs, holes, tabs, or any combination thereof. (See Appendix B, RDG B, for typical mounting patterns.) If the item has a single mounting facility center group, enter I/SAC 2X from Column 1, followed by Reply Codes A, B, C, or D, as applicable, from Column 2, Appendix A, Table 6. b. Multiple Identical Mounting Facility Center Groups Use I/SAC Code 2Z from Column 1, followed by Reply Codes A, B, C, or D, as applicable, from Column 2, Appendix A, Table 6. c. Multiple Nonidentical Mounting Facility Center Group Use I/SAC Codes 2A through 2D from Column 1, followed by Reply Codes A, B, C, or D, as applicable, from Column 2, Appendix A, Table 6. To establish the priority of sequence for determining the first mounting facility center group, use the following procedure: If replies to MRC AEJN are identical, proceed to MRC ABKQ and so on, until the replies are different. The first reply selected in the order given below will be the first I/SAC Reply Code 1A. The same procedure will be used to determine the second I/SAC Reply Code 1B and each succeeding mounting facility center group. (a) MRC AEJN, ascending numeric sequence (b) MRC ABKQ, ascending numeric sequence (c) MRC ABKR, ascending numeric sequence (d) MRC CSQJ, ascending numeric sequence (e) MRC CQKH, ascending numeric sequence (f) MRC AFFL, ascending numeric sequence 2. See Appendix B, Reference Drawing Group B for typical mounting patterns. 3. NOTE FOR MRC AEJN: IF THE ITEM HAS TWO HOLES, SLOTS, STUDS, ETC. OR ANY COMBINATION THEREOF REPLY TO MRC AEJN. FOR ITEM ORIENTATION INSTRUCTIONS AND ILLUSTRATIONS, SEE APPENDIX B, REFERENCE DRAWING GROUP F.NOTE FOR MRCS AEJN, ABKQ, ABKR, CSQJ, CQKH, AND AFFL: The following I/SAC special recording instructions apply when replying to requirements that reference Appendix A, Table 6. a. Single Mounting Facility Center Group A single mounting facility center group may consist of a single group of studs, holes, tabs, or any combination thereof. (See Appendix B, RDG B, for typical mounting patterns.)If the item has a single mounting facility center group, enter I/SAC 2X from Column 1, followed by Reply Codes A, B, C, or D, as applicable, from Column 2, Appendix A, Table 6. b. Multiple Identical Mounting Facility Center Groups Use I/SAC Code 2Z from Column 1, followed by Reply Codes A, B, C, or D, as applicable, from Column 2, Appendix A, Table 6. c. Multiple Nonidentical Mounting Facility Center Group Use I/SAC Codes 2A through 2D from Column 1, followed by Reply Codes A, B, C, or D, as applicable, from Column 2, Appendix A, Table 6. To establish the priority of sequence for determining the first mounting facility center group, use the following procedure: If replies to MRC AEJN are identical, proceed to MRC ABKQ and so on, until the replies are different. The first reply selected in the order given below will be the first I/SAC Reply Code 1A. The same procedure will be used to determine the second I/SAC Reply Code 1B and each succeeding mounting facility center group. (a) MRC AEJN, ascending numeric sequence (b) MRC ABKQ, ascending numeric sequence (c) MRC ABKR, ascending numeric sequence (d) MRC CSQJ, ascending numeric sequence (e) MRC CQKH, ascending numeric sequence (f) MRC AFFL, ascending numeric sequence 2. See Appendix B, Reference Drawing Group B for typical mounting patterns. 3. NOTE FOR MRC AEJN: IF THE ITEM HAS TWO HOLES, SLOTS, STUDS, ETC. OR ANY COMBINATION THEREOF REPLY TO MRC AEJN. FOR ITEM ORIENTATION INSTRUCTIONS AND ILLUSTRATIONS, SEE APPENDIX B, REFERENCE DRAWING GROUP F.

APP Key	MRC	Mode Code	Requirements

ALL * (See Note Above)

AEJN J DISTANCE BETWEEN MOUNTING FACILITY CENTERS

Definition: THE DISTANCE BETWEEN MOUNTING FACILITY CENTERS.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 6, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., AEJN2XXJAA1.000*; AEJN2XXJLA25.4*; AEJN2ZAJAA1.000*; AEJN2ZBJAA1.250*; AEJN2XXJAB1.093$$JAC1.125*;

AEJN2AXJAA1.125*

AEJN2BXJAA1.500*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

NOTE FOR MRCS ABKQ AND ABKR: FOR ITEMS WITH MORE THAN EIGHT OR IRREGULARLY SPACED MOUNTING FACILITIES, OMIT REPLIES TO MRCS ABKQ AND ABKR.

ALL * (See Note Above and Preceding MRC AEJN)

ABKQ J CENTER TO CENTER DISTANCE BETWEEN MOUNTING FACILITIES PARALLEL TO LENGTH

Definition: THE DISTANCE BETWEEN THE CENTER OF ONE MOUNTING FACILITY AND THE CENTER OF THE ADJACENT MOUNTING FACILITY PARALLEL TO THE LENGTH.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 6, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., ABKQ2XXJAA1.500*; ABKQ2XXJLA45.4*; ABKQ2ZAJAA1.000*; ABKQ2ZBJAA1.250*; ABKQ2XXJAB1.375$$JAC1.500*;

APP Key	MRC	Mode Code	Requirements

ABKQ2AXJAA1.125*

ABKQ2BXJAA1.500*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Notes Preceding MRCs ABKQ and AEJN)

ABKR J CENTER TO CENTER DISTANCE BETWEEN MOUNTING FACILITIES PARALLEL TO WIDTH

Definition: THE DISTANCE BETWEEN THE CENTER OF ONE MOUNTING FACILITY AND THE CENTER OF THE ADJACENT MOUNTING FACILITY PARALLEL TO THE WIDTH.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 6, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., ABKR2XXJAA0.750*; ABKR2XXJLA9.5*; ABKR2ZAJAA1.000*; ABKR2ZBJAA1.250*; ABKR2XXJAB0.700$$JAC0.800*;

ABKR2AXJAA1.125*

ABKR2BXJAA1.500*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

APP Key	MRC	Mode Code	Requirements

NOTE FOR MRCS CSQJ AND CQKH: WHEN THE MOUNTING FACILITY ARRANGEM N IS TRIANGULAR HAVING TWO EQUAL SIDES, REPLY TO MRCS CSQJ AND CQKH.

ALL * (See Notes Above and Preceding MRC AEJN)

CSQJ J CENTER TO CENTER DISTANCE BETWEEN MOUNTING FACILITIES PARALLEL TO THE ALTITUDE OF AN ISOSCELES TRIANGLE

Definition: THE DISTANCE BETWEEN THE CENTER OF ONE MOUNTING FACILITY AND THE CENTER OF THE ADJACENT MOUNTING FACILITY PARALLEL TO THE ALTITUDE OF AN ISOSCELES TRIANGLE.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 6, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., CSQJ2XXJAA1.500*; CSQJ2XXJLA3.8*; CSQJ2ZAJAA2.125*; CSQJ2ZBJAA2.250*; CSQJ2XXJAB1.400$$JAC1.600*;

CSQJ2AXJAA1.125*

CSQJ2BXJAA2.500*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Notes Preceding MRCs CSQJ and AEJN)

CQKH J CENTER TO CENTER DISTANCE BETWEEN MOUNTING FACILITIES PARALLEL TO THE BASE OF AN ISOSCELES TRIANGLE

Definition: THE DISTANCE BETWEEN THE CENTER OF ONE MOUNTING FACILITY AND THE CENTER OF THE ADJACENT MOUNTING FACILITY PARALLEL TO THE BASE OF AN ISOSCELES TRIANGLE.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 6, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., CQKH2XXJAA1.250*; CQKH2XXJLA3.8*; CQKH2ZAJAA1.125*; CQKH2ZBJAA1.750*; CQKH2XXJAB1.400$$JAC1.600*;

CQKH2AXJAA1.125*

CQKH2BXJAA2.500*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC AEJN)

AFFL J MOUNTING BOLT CIRCLE DIAMETER

Definition: THE LENGTH OF A STRAIGHT LINE WHICH PASSES THROUGH THE CENTER OF A MOUNTING BOLT CIRCLE, AND TERMINATES AT THE CIRCUMFERENCE.

Reply Instructions: Enter the applicable I/SAC from Appendix A , Table 6, followed by the Mode Code, the applicable Reply Codes from Tables 1 and 2 below, and the numeric value. (e.g., AFFL2XXJAA1.062*; AFFL2XXJLA26.9*; AFFL2ZAJAA1.250*; AFFL2ZBJAA1.875*; AFFL2XXJAB1.125$$JAC1.250*;

AFFL2AXJAA1.375*

AFFL2BXJAA1.500*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)

APP Key	MRC	Mode Code	Requirements
		A	NOMINAL
		B	MINIMUM
		C	MAXIMUM

ALL

AKNA D INCLOSURE TYPE

Definition: INDICATES THE TYPE OF INCLOSURE PROVIDED TO COAT, COVER, PROTECT, OR ENCASE THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AKNADAE*)

REPLY CODE	REPLY (AG85)
AH	FULLY INCLOSED (includes all items which are completely encapsulated, encased, or molded, but are not hermetically sealed)
AJ	FULLY INCLOSED WITH OIL
AD	HERMETICALLY SEALED (a structural feature whereby an item's inclosure material, such as metal, glass, or ceramic, are fused together to prevent the entry, or exit, of gases, moisture or liquids)
AK	HERMETICALLY SEALED WITH OIL
AE	OPEN (includes all items with exposed windings or laminations which may have a protective covering of some type)
AP	PARTIALLY INCLOSED
AF	PARTIALLY INCLOSED, DOUBLE SHELL (an inclosure consisting of two half shells which cover both sides of the transformer winding, but do not cover the laminations)
AG	PARTIALLY INCLOSED, HALF SHELL (an inclosure which covers only one side of the exposed portion of the transformer winding, but does not cover the laminations)

APP Key	MRC	Mode Code	Requirements

NOTE FOR MRCS ADAQ, ADAR, ADAU, ADAT, ABHP, ADAV, ABKW, AND ABMK: 1. Dimensional data must be replied for Types 1, 1A, and 1B item descriptions. 2. If source data specifies both body and overall dimensions, disregard the body dimension and record overall dimension for that specific dimensional direction such as length. If source data specify a single dimension and that dimension includes all protrusions such as mounting brackets, terminals, etc., in that direction, or the item has no protrusions, record that dimension as overall. If the dimension excludes mounting brackets, terminals, record the dimension as body. 3. For cylindrical shaped items, replies must be entered for: a. MRCs ADAQ and ADAR or b. MRCs ADAQ and ADAV or c. MRCs ABHP and ADAR or d. MRCs ABHP and ADAV 4. For all other items, replies must be entered for: a. MRCs ADAQ, ADAU, and ADAT or b. MRCs ADAQ, ADAU, and ABMK or c. MRCs ADAQ, ABKW, and ADAT or d. MRCs ADAQ, ABKW, and ABMK or e. MRCs ABHP, ADAU, and ADAT or f. MRCs ABHP, ADAU, and ABMK or g. MRCs ABHP, ABKW, and ADAT or h. MRCs ABHP, ABKW, and ABMK 5. See Appendix B, Reference Drawing Group F, for item orientation instructions and illustrations.

ALL * (See Note Above)

ADAQ J BODY LENGTH

Definition: A MEASUREMENT OF THE LONGEST DIMENSION OF THE BODY, IN DISTINCTION FROM WIDTH.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADAQJAA1.000*; ADAQJLA25.4*; ADAQJAB1.000$$JAC1.125*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

ADAR J BODY OUTSIDE DIAMETER

APP Key	MRC	Mode Code	Requirements

Definition: THE LENGTH OF A STRAIGHT LINE WHICH PASSES THROUGH THE CENTER OF THE BODY, AND TERMINATES AT THE OUTSIDE CIRCUMFERENCE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADARJAA0.500*; ADARJLA12.7*; ADARJAB0.484$$JAC0.516*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

ADAU J BODY HEIGHT

Definition: A MEASUREMENT FROM THE BOTTOM TO THE TOP OF THE BODY, IN DISTINCTION FROM DEPTH.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADAUJAA0.750*; ADAUJLA19.0*; ADAUJAB0.734$$JAC0.766*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

APP Key	MRC	Mode Code	Requirements
	ADAT	J	BODY WIDTH

Definition: A MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF THE BODY, IN DISTINCTION FROM THICKNESS.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADATJAA1.000*; ADATJLA25.4*; ADATJAB1.000$$JAC1.125*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

	ABHP	J	OVERALL LENGTH

Definition: THE DIMENSION MEASURED ALONG THE LONGITUDINAL AXIS WITH TERMINATED POINTS AT THE EXTREME ENDS OF THE ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABHPJAA4.000*; ABHPJLA101.6*; ABHPJAB3.900$$JAC4.100*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

APP Key	MRC	Mode Code	Requirements
	ADAV	J	OVERALL DIAMETER

Definition: A MEASUREMENT OF THE LONGEST STRAIGHT LINE ACROSS A CIRCULAR CROSS-SECTIONAL PLANE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADAVJAA2.000*; ADAVJLA50.8*; ADAVJAB1.900$$JAC2.100*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

	ABKW	J	OVERALL HEIGHT

Definition: THE DISTANCE MEASURED IN A STRAIGHT LINE FROM THE BOTTOM TO THE TOP OF AN ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKWJAA6.000*; ABKWJLA152.4*; ABKWJAB5.750$$JAC6.250*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL * (See Note Preceding MRC ADAQ)

APP Key	MRC	Mode Code	Requirements
	ABMK	J	OVERALL WIDTH

Definition: AN OVERALL MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF AN ITEM, IN DISTINCTION FROM THICKNESS.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABMKJAA1.250*; ABMKJLA31.7*; ABMKJAB1.125$$JAC1.375*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

NOTE FOR MRCS CBBL AND FEAT: E MODE REPLIES WILL NOT BE ACCEPTED IN REPLY TO MRC CBBL. IF A REPLY IS NOT REFERENCED ON THE TABLE FOR MRC CBBL, ENTER THE FEATURE IN REPLY TO MRC FEAT.

ALL * (See Note Above)

	CBBL	D	FEATURES PROVIDED

Definition: THOSE FEATURES, NOT OTHERWISE SPECIFIED, WHICH MAY BE REQUIRED FOR PROPER FUNCTIONING OF THE ITEM.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 9. (e.g., CBBLDCCS*; CBBLDBRP$$DCAR*)

ALL *

	AARG	D	RELIABILITY INDICATOR

Definition: AN INDICATION THAT THE LEVEL OF PROBABILITY THAT AN ITEM WILL OPERATE WITHOUT FAILURE, AT A SPECIFIED RATED CAPABILITY, AT A SPECIFIED TEMPERATURE, AND FOR A SPECIFIED PERIOD OF TIME, HAS BEEN ESTABLISHED BY TESTING RANDOM SAMPLES OF PRODUCTION LOT.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AARGDE*)

Enter Reply Code E for this requirement only if source data indicate the item being described has been measured for reliability and the source document identification is recorded in reply to MRC TEST.

REPLY CODE	REPLY (AA61)
E	ESTABLISHED
N	NOT ESTABLISHED

NOTE FOR MRC AARH: IF REPLY CODE E IS ENTERED FOR MRC AARG, REPLY TO MRC AARH.

ALL * (See Note Above)

AARH B RELIABILITY FAILURE RATE LEVEL IN PERCENT

Definition: THE RATE OF FAILURE DETERMINED UNDER SPECIFIED CONDITIONS TO ESTABLISH THE RELIABILITY OF AN ITEM, EXPRESSED IN PERCENT.

Reply Instructions: Enter the numeric value. (e.g., AARHB0.001*)

ALL * (See Note Preceding MRC CBBL)

FEAT G SPECIAL FEATURES

Definition: THOSE UNUSUAL OR UNIQUE CHARACTERISTICS OR QUALITIES OF AN ITEM NOT COVERED IN THE OTHER REQUIREMENTS AND WHICH ARE DETERMINED TO BE ESSENTIAL FOR IDENTIFICATION.

Reply Instructions: Enter the reply in clear text. Separate multiple replies with a semicolon. (e.g., FEATGADJUSTABLE NOSE CLIP*; FEATGADJUSTABLE NOSE PIECE; DISPOSABLE*)

ALL*

TEST J TEST DATA DOCUMENT

APP Key	MRC	Mode Code	Requirements

Definition: THE SPECIFICATION, STANDARD, DRAWING, OR SIMILAR INSTRUMENT THAT SPECIFIES ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS OR TEST CONDITIONS UNDER WHICH AN ITEM IS TESTED AND ESTABLISHES ACCEPTABLE LIMITS WITHIN WHICH THE ITEM MUST CONFORM IDENTIFIED BY AN ALPHABETIC AND/OR NUMERIC REFERENCE NUMBER. INCLUDES THE COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE OF THE ENTITY CONTROLLING THE INSTRUMENT.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the 5-position CAGE Code, a dash, and the document identification number.

(e.g., TESTJA12345-CWX654321*;

TESTJA1234A-654321$$JB5556A-663654*;

TESTJAA2345-654321$JB55566-663654*)

REPLY CODE	REPLY (AC28)
A	SPECIFICATION (Includes engineering type bulletins, brochures, etc., that reflect specification type data in specification format; excludes commercial catalogs, industry directories, and similar trade publications, reflecting general type data on certain environmental and performance requirements and test conditions that are shown as "typical," "average," "nominal," etc.)
B	STANDARD (Includes industry or association standards, individual manufacturer standards, etc.)
C	DRAWING (This is the basic governing drawing, such as a contractor drawing, original equipment manufacturer drawing, etc.; excludes any specification, standard, or other document that may be referenced in a basic governing drawing)

ALL*

SPCL G SPECIAL TEST FEATURES

Definition: TEST CONDITIONS AND RATINGS, OR ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS THAT ARE DIFFERENT, MORE CRITICAL, OR MORE SPECIFIC THAN THOSE SPECIFIED IN A GOVERNING TEST DATA DOCUMENT.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the reply in clear text. (e.g., SPCLGSELECTED AND TESTED FOR NAVIGATIONAL SYSTEMS*)

ALL*

ZZZK J SPECIFICATION/STANDARD DATA

Definition: THE DOCUMENT DESIGNATOR OF THE SPECIFICATION OR STANDARD WHICH ESTABLISHED THE ITEM OF SUPPLY.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the Commercial and Government Entity (CAGE) Code of the entity controlling the document, a dash, and the document designator. The agency that controls the limited coordination document must be preceded and followed by a slash following the designator. The word canceled or superseded must be preceded and followed by a slash for the designator. Professional and industrial association specifications/standards are differentiated from a manufacturer's specification in that the data has been coordinated and published by the professional and industrial association. Include amendments and revisions where applicable.

(e.g., ZZZKJT81337-30642B*;

ZZZKJS81349-MIL-D-180 REV1/CANCELED/*;

ZZZKJP80205-NAS1103*;

ZZZKJS81349-MIL-C-1140C/CE/*;

ZZZKJT81337-30642B$$JP80205-NAS1103*)

REPLY CODE	REPLY (AN62)
S	GOVERNMENT SPECIFICATION
T	GOVERNMENT STANDARD
D	MANUFACTURERS SOURCE CONTROL
R	MANUFACTURERS SPECIFICATION
N	MANUFACTURERS SPECIFICATION CONTROL
M	MANUFACTURERS STANDARD
B	NATIONAL STD/SPEC
A	PROFESSIONAL/INDUSTRIAL ASSOCIATION SPECIFICATION
P	PROFESSIONAL/INDUSTRIAL ASSOCIATION STANDARD

APP Key	MRC	Mode Code	Requirements
NOTE FOR MRC ZZZT: IF THE SPECIFICIATION/STANDARD CITED IN REPLY TO MRC ZZZK IS NONDEFINITIVE, REPLY TO MRC ZZZT. THIS REPLY IS THE DATA WHICH IS NOT RECORDED IN SEGMENT C.			
ALL * (See Note Above)	ZZZT	J	NONDEFINITIVE SPEC/STD DATA Definition: THE NUMBER, LETTER, OR SYMBOL THAT INDICATES THE TYPE, STYLE, GRADE, CLASS, AND THE LIKE, OF AN ITEM IN A NONIDENTIFYING SPECIFICATION OR STANDARD. Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 10, followed by the appropriate number, letter, or symbol. (e.g., ZZZTJTY1*; ZZZTJTY1$$JSTA*; ZZZTJTY1$JSTA*)
ALL*	ZZZY	G	REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS Definition: A FEATURE OF THE ITEM OF SUPPLY WHICH MUST BE SPECIFICALLY RECORDED WHEN THE REFERENCE NUMBER COVERS A RANGE OF ITEMS. Reply Instructions: Enter the reply in clear text. (e.g., ZZZYGCOLOR CODED LEADS*; ZZZYGAS DIFFERENTIATED BY MATERIAL*)
ALL*	CRTL	A	CRITICALITY CODE JUSTIFICATION Definition: THE MASTER REQUIREMENT CODES OF THOSE REQUIREMENTS WHICH ARE TECHNICALLY CRITICAL BY REASON OF TOLERANCE, FIT, PERFORMANCE, OR OTHER CHARACTERISTICS WHICH AFFECT IDENTIFICATION OF THE ITEM. Reply Instructions: Enter the Master Requirement Code for the requirement, the reply to which renders the item as being critical. (e.g., CRTLAMATL*; CRTLAMATL$$ASURF*) Reply to this requirement only if the header record for the item identification for the item being identified has been coded as critical.

APP Key	MRC	Mode Code	Requirements

NOTE FOR MRC PRPY: IF DOCUMENT AVAILABILITY CODE B, D, F, OR H, REPLY TO MRC PRPY.

ALL* (See Note Above)

PRPY A PROPRIETARY CHARACTERISTICS

Definition: IDENTIFICATION OF THOSE CHARACTERISTICS INCLUDED IN THE DESCRIPTION FOR WHICH A NON-GOVERNMENT ACTIVITY HAS IDENTIFIED ALL OR SELECTED CHARACTERISTICS OF THE ITEM AS BEING PROPRIETARY AND THEREFORE RESTRICTED FROM RELEASE OUTSIDE THE GOVERNMENT WITHOUT PRIOR PERMISSION OF THE ORIGINATOR OF THE DATA.

Reply Instructions: Enter the MRC codes of the individual characteristics of the description which are marked proprietary on the technical data, using AND coding ($$) for multiple characteristics. If all the MRCs are proprietary, enter the reply PACS. If none of the MRCs is proprietary, enter the reply NPAC. (e.g., PRPYAPACS*; PRPYANPAC*; PRPYAMATL$$ASURF*)

NOTE FOR MRC ENAC: ANSWERING THIS MRC WILL GENERATE AN ENAC CODE IN THE ITEM IDENTIFICATION SEGMENT (A) OF THE NSN.

ALL * (See Note Above)

ENAC D ENVIRONMENTAL ATTRIBUTE CODE

Definition: INDICATES THE TYPE OF PRODUCT THAT MEETS OR EXCEEDS THE GOVERNMENT GUIDELINES FOR ENVIRONMENTALLY PREFERRED CHARACTERISTICS.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ENACDGJ*)

REPLY CODE	REPLY (EN02)
GJ	ENERGY EFFICIENT - OTHER - TRANSFORMERS
BB	FLUID-FILLED TRANSFORMERS CONTAINING A SYNTHETIC ESTER-BASED FLUID
BC	FLUID-FILLED TRANSFORMERS CONTAINING A VEGETABLE OIL-BASED FLUID
NR	REVIEWED – DOES NOT MEET SOME ENAC CRITERIA

APP Key	MRC	Mode Code	Requirements

NOTE FOR MRC ALAX: IF REPLY CODE BB OR BC WAS ENTERED FOR MRC ENAC, REPLY TO MRC ALAX.

ALL * (See Note Above)

ALAX B BIOBASED CONTENT PERCENTAGE

Definition: THE STATED PERCENTAGE OF THE ITEMS CONTENT THAT IS BIOBASED.

Reply Instructions: Enter the numeric value. (e.g., ALAXB75.0*)

ALL*

ELRN G EXTRA LONG REFERENCE NUMBER

Definition: A REFERENCE NUMBER EXCEEDING 32 POSITIONS.

Reply Instructions: Enter the entire reference number. Do not include the 5-position Commercial and Government Entity (CAGE) Code unless there is more than one extra long reference number on the NSN, (e.g., ELRNGANN112036BIL060557LEN313605UZ62365*).

If there is more than one extra long reference number on the NSN, include the CAGE or NCAGE and separate each reference by using the "&" character, (e.g., 28480 ANN112036BIL060557LEN313605UZ62365 & S1234 NN112036BIL060557LEN313605UZ62365).

In determining quantity of characters in the reference number, count will be made after modification in accordance with Volume 2, Chapter 9, FLIS Procedures Manual, DoD 4100.39-M.

NOTE FOR MRC NHCF: IF THE CRITICALITY CODE IS E, H, OR M, REPLY TO MRC NHCF.

ALL* (See Note Above)

NHCF D NUCLEAR HARDNESS CRITICAL FEATURE

Definition: AN INDICATION OF THE NUCLEAR HARDNESS CRITICALITY OF THE ITEM.

Reply Instructions: Enter the Reply Code from the table below. (e.g., NHCFDCY*)

REPLY CODE	REPLY (AD05)
CY	HARDENED

APP Key	MRC	Mode Code	Requirements

F*, L*, T*

ACYE D TRANSFORMER FUNCTION

Definition: A DESIGNATION OF THE TYPE OF CIRCUIT OPERATIONAL PERFORMANCE FOR WHICH THE ITEM IS DESIGNED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ACYEDB*; ACYEDB$$DC*)

REPLY CODE	REPLY (AC00)
B	INPUT
C	INTERSTAGE
D	LINE
E	MODULATION
F	OUTPUT

NOTE FOR MRC ACZD: IF APPLIED INPUT/OUTPUT POWER UTILIZES TWO OR MORE PHASES OF AN AC POWER LINE, REPLY TO MRC ACZD.

G*, J*, M*, P*, T* (See Note Above)

ACZD D TRANSFORMER WINDING CONNECTION TYPE

Definition: INDICATES THE TYPE OF CONNECTING WINDINGS IN A TRANSFORMER TO BE POWERED BY TWO OR THREE PHASE CURRENTS.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 13. (e.g., ACZDDC*; ACZDDB$$DC*; ACZDDB$DC*)

See Appendix B, Reference Drawing Group D, for schematics of various types of winding connections.

J*

BFMF D COOLING METHOD

Definition: THE MEANS OF COOLING USED TO MAINTAIN THE REQUIRED OPERATING TEMPERATURE OF THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BFMFDAAT*)

APP Key	MRC	Mode Code	Requirements

REPLY CODE	REPLY (AN05)
AAP	FORCED AIR
ABD	FORCED OIL
AAQ	LIQUID
AAT	SELF-COOLED

J*

AYTS D COOLING TYPE

Definition: INDICATES THE TYPE OF COOLING PROVIDED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AYTSDADQ*)

REPLY CODE	REPLY (AB75)
ADQ	FINS
ADR	LOUVERS
ADS	TUBES

G*, J*, K*

AFHN H INSTALLATION FOR WHICH DESIGNED

Definition: THE TYPE OF INSTALLATION FOR WHICH THE ITEM IS DESIGNED.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below. (e.g., AFHNHAATAF*; AFHNHAATAF$HAAVAF*)

Table 1

REPLY CODE	REPLY (AH21)
AAT	INDOOR
AAV	OUTDOOR

Table 2

REPLY CODE	REPLY (AJ17)
AG	NONPORTABLE
AF	PORTABLE

ALL *

APP Key	MRC	Mode Code	Requirements
	AEHZ	J	MAXIMUM OPERATING TEMP

Definition: THE MAXIMUM TEMPERATURE AT WHICH THE ITEM IS RATED TO OPERATE FOR AN EXTENDED PERIOD OF TIME.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AEHZJC105.0*)

REPLY CODE	REPLY (AB36)
C	DEG CELSIUS
F	DEG FAHRENHEIT

NOTE FOR MRC AGAV: REPLY TO THIS MRC WHEN THE ITEM BEING DESCRIBED IS PECULIAR TO A SINGLE APPLICATION.

ALL * (See Note Above)

	AGAV	G	END ITEM IDENTIFICATION

Definition: THE NATIONAL STOCK NUMBER OR THE IDENTIFICATION INFORMATION OF THE END EQUIPMENT FOR WHICH THE ITEM IS A PART.

Reply Instructions: Enter the reply in clear text.

(e.g., AGAVG3930-00-000-0000*;

AGAVGRECEIVER-TRANSMITTER, RT204APN69*)

ALL *

	BBRJ	D	SPECIAL HANDLING FEATURE

Definition: THE UNUSUAL OR UNIQUE CHARACTERISTIC(S) OR QUALITY(IES) OF AN ITEM WHICH NECESSITATES THE ESTABLISHMENT OF A REQUIREMENT FOR SPECIAL HANDLING.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BBRJDAQ*; BBRJDAJ$$DAK*)

REPLY CODE	REPLY (AM83)
AZ	HAZARDOUS-CONTAINS POLYCHLORINATED BIPHENYLES (PCBs)

APP Key	MRC	Mode Code	Requirements
		AJ	HAZARDOUS FOR AIR TRANSPORTATION, REGULATED BY DSAM 4145.3 OR ATARAT-TARIFF-6D
		AK	MAGNETIC
		AQ	PILFERABLE (precious metal)

ALL *

PRMT D PRECIOUS MATERIAL

Definition: IDENTIFICATION OF THE PRECIOUS MATERIAL CONTAINED IN THE ITEM.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 11. (e.g., PRMTDAGA000*; PRMTDAUA000$$DAGA000*; PRMTDAGA000$DAUA000*)

ALL *

PMLC J PRECIOUS MATERIAL AND LOCATION

Definition: AN INDICATION OF THE PRECIOUS MATERIAL AND ITS LOCATION IN THE ITEM.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 11, followed by the location in clear text. (e.g., PMLCJAUA000TERMINALS*; PMLCJAUA000TERMINALS$$JAGA000INTERNAL SURFACES*; PMLCJAGA000TERMINALS$JAUA000INTERNAL SURFACES*)

ALL *

ABFE D HAZARDOUS LOCATIONS/ENVIRONMENTAL PROTECTION

Definition: THE SPECIFIC COMMERCIAL RATING WHICH CLASSES THE ITEM AS TO WHAT DEGREE THE ITEM WILL WITHSTAND ENVIRONMENTAL ELEMENTS AND/OR HAZARDOUS LOCATION.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 12. (e.g., ABFEDAA*; ABFEDAA$$DDY*)

ALL *

HZRD D HAZARDOUS SUBSTANCES

APP Key	MRC	Mode Code	Requirements

Definition: THE SUBSTANCES AND/OR MATERIALS CONTAINED IN THE ITEM THAT HAVE BEEN IDENTIFIED AS HAZARDOUS OR ENVIRONMENTALLY DAMAGING BY THE ENVIRONMENTAL PROTECTION AGENCY OR OTHER AUTHORIZED GOVERNMENT AGENCY.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., HZRDDHAZ012*; HZRDDHAZ012$$DHAZ027*)

REPLY CODE	REPLY (HZ00)
HAZ012	COPPER
HAZ027	IRIDIUM

ALL *

CXCY G PART NAME ASSIGNED BY CONTROLLING AGENCY

Definition: THE NAME ASSIGNED TO THE ITEM BY THE GOVERNMENT AGENCY OR COMMERCIAL ORGANIZATION CONTROLLING THE DESIGN OF THE ITEM.

Reply Instructions: Enter the reply in clear text. (e.g., CXCYGLINE PROCESSOR CONTROL BOARD*)

Reply Tables

Table 1 - TERMINAL TYPES
TERMINAL TYPES

REPLY CODE	REPLY (AN89)
AFZ	BANANA JACK
AAB	BANANA PLUG
ABL	BINDING POST
AAD	BONDING PAD (chip/surface mount)
AGA	BUS (BAR) CONDUCTOR
AGB	BUSHING *
AEP	CABLE W/CONNECTOR
ABN	CLAMP
ADB	CLIP
AGC	COLLAR/RING
ACT	COMPONENT SOCKET
AEB	COMPRESSION
ACN	CONNECTOR, PLUG (male)
AAF	CONNECTOR, RECEPTACLE (female)
AJT	ELECTRON TUBE BASE
ABR	EYELET
AGD	FEED THRU
AAH	FERRULE
AGE	FERRULE CLIP
AEC	KNIFE BLADE

REPLY CODE	REPLY (AN89)
AGF	LINE CORD
	Line Cord w/Plug (use Reply Code AEP)
AGH	PHONE JACK
AAM	PIN
	Plug Coaxial (use Reply Code ACN)
ACR	PRINTED CIRCUIT
ADA	QUICK DISCONNECT, FEMALE
ACZ	QUICK DISCONNECT, MALE
	Receptacle, Coaxial (use Reply Code AAF)
AAR	RIBBON
ABQ	SCREW
AEF	SLOTTED LUG
ADC	SNAP-ON, FEMALE
ADF	SNAP-ON, MALE
	Socket, Large 7 Pin (use Reply Code ACT)
	Socket, Lock-in (use Reply Code ACT)
	Socket, Miniature 7 Pin (use Reply Code ACT)
	Socket, Noval (use Reply Code ACT)
	Socket, Octal (use Reply Code ACT)
	Socket, Subminiature 8 Pin (use Reply Code ACT)
	Socket (use Reply Code ACT)
AAS	SOLDER STUD
AEK	SOLDERLESS LUG
AGQ	STANDOFF CLIP
AGR	STANDOFF INSULATOR
AGS	STANDOFF, SCREW
AGT	STANDOFF, SOCKET *
AAW	STANDOFF, SOLDER LUG
AGW	STANDOFF, SOLDERLESS LUG
AAY	STANDOFF, THREADED STUD
ABA	STANDOFF, WIRE LEAD
ABB	TAB, SOLDER LUG
ABX	TAB, W/SCREW
AGX	TERMINAL BLOCK W/SCREWS
ABC	THREADED HOLE
ABD	THREADED STUD
AHA	THUMB SCREW *
AHB	TIP JACK *
ACB	TURRET
ACM	WIRE HOOK
ACC	WIRE LEAD (includes pigtail)
AGY	WIRE LEAD W/CLAMP
AEG	WIRE LEAD W/LUG
AGZ	WIRE LEAD W/TUBE CAP
ACD	WIRE LOOP

Table 2 -
FOR MRCS: BKPL, ABHY, CQPZ, CWJS, CRBZ, CRGS, ACYV, CRHJ, CRLC, ACYW, AND CRMJ.

COLUMN 1	
REPLY CODE	REPLY
3Z	ALL COMPONENTS
3X	SINGLE COMPONENTS
3A	1ST COMPONENT
3B	2ND COMPONENT
3C	3RD COMPONENT
3D	4TH COMPONENT
3E	5TH COMPONENT
3F	6TH COMPONENT
3G	7TH COMPONENT
3H	8TH COMPONENT

COLUMN 2	
REPLY CODE	REPLY
Z	ALL
X	SINGLE
A	1ST
B	2ND
C	3RD
D	4TH
E	5TH
F	6TH

COLUMN 3	
REPLY CODE	REPLY
G	CONTROL (includes bias)
A	PRIMARY
B	PRIMARY INPUT
C	PRIMARY OUTPUT
D	SECONDARY
F	TERTIARY
E	WINDING

Table 3 - IDENTIFIED SECONDARY ADDRESS CODING FOR MRCS: ACZB, ACZF, ACZH, ACZN, ACZP, ACZR, CTHD, ACZU, ACZX, BPLC, ACZC, AND AKDX.
IDENTIFIED SECONDARY ADDRESS CODING FOR MRCS: ACZB, ACZF, ACZH, ACZN, ACZP, ACZR, CTHD, ACZU, ACZX, BPLC, ACZC, AND AKDX.

REPLY CODE	REPLY
1Z	ALL COMPONENTS
1X	SINGLE COMPONENT
1A	1ST COMPONENT
1B	2ND COMPONENT

REPLY CODE	REPLY
1C	3RD COMPONENT
1D	4TH COMPONENT
1E	5TH COMPONENT
1F	6TH COMPONENT
1G	7TH COMPONENT
1H	8TH COMPONENT

Table 4 - IDENTIFIED SECONDARY ADDRESS CODING FOR MRCS: AXGY, AKPV, ABTB, ABTD, THSD, CQJX, CMLP AND CTTC
IDENTIFIED SECONDARY ADDRESS CODING FOR MRCS: AXGY, AKPV, ABTB, ABTD, THSD, CQJX, CMLP AND CTTC

REPLY CODE	REPLY
1Z	ALL GROUPINGS
1X	SINGLE GROUP
1A	1ST GROUP
1B	2ND GROUP
1C	3RD GROUP
1D	4TH GROUP

Table 5 - MOUNTING METHODS
MOUNTING METHODS

REPLY CODE	REPLY (AM39)
BDH	ADHESIVE
ABC	BRACKET
ABD	BUSHING
BRZ	CAPTIVE NUT
	Cement (use Reply Code BDH)
ABH	CLAMP
AEC	CLINCH NUT
AFL	CLIP
AFM	COLLAR
ABJ	CORE
	Expansion Clamp (use Reply Code ABH)
BSB	EXPANSION PLUG
BSC	FERRULE
ACR	FLANGE
AEY	FOOT (includes feet)
ABL	FRICTION (includes press fit, forced fit, and compression)
BSD	HUB
	Pin (use Reply Code ABP)
ABP	PLUG-IN
BGC	RETAINING RING (includes lock ring and split ring)
BEF	SHANK
AKC	SLEEVE

REPLY CODE	REPLY (AM39)
ABY	SLOT (includes elongated hole)
AEF	SOCKET
	Spade Bolt (use Reply Code AET)
BSF	SPADE LUG
AER	SPRING
	Spring Clip (use Reply Code AFL)
ACB	STRAP
ACC	TAB (includes twist lug)
	Tapered Hole (use Reply Code ACQ)
	Tapered Slot (use Reply Code ABY)
ACD	TERMINAL
AES	THREADED BODY
AFA	THREADED BUSHING
AHF	THREADED HOLE (includes nuts, inserts, and tapped hole)
AET	THREADED STUD (includes lug)
ACQ	UNTHREADED HOLE
AEW	UNTHREADED STUD
BBP	YOKE

Table 6 - IDENTIFIED SECONDARY ADDRESS CODING FOR MRCS: AEJN, ABKQ, ABKR, CSQJ, CQKH, AND AFFL.

IDENTIFIED SECONDARY ADDRESS CODING

COLUMN 1	
REPLY CODE	REPLY
2Z	ALL MOUNTING FACILITIES
2X	SINGLE MOUNTING FACILITY
2A	1ST MOUNTING FACILITY
2B	2ND MOUNTING FACILITY
2C	3RD MOUNTING FACILITY
2D	4TH MOUNTING FACILITY
COLUMN 2	
REPLY CODE	REPLY
Z	ALL CENTER GROUPINGS
X	SINGLE CENTER GROUP
A	1ST CENTER GROUP
B	2ND CENTER GROUP
C	3RD CENTER GROUP
D	4TH CENTER GROUP

Table 7 - INPUT-OUTPUT PHASE RELATIONSHIPS
INPUT-OUTPUT PHASE RELATIONSHIPS

REPLY CODE	REPLY (AE07)
B	SINGLE PHASE TO SINGLE PHASE

REPLY CODE	REPLY (AE07)
K	SINGLE PHASE TO SIX PHASE
L	SINGLE PHASE TO THREE PHASE
M	SIX PHASE TO SIX PHASE
N	SIX PHASE TO THREE PHASE
J	THREE PHASE TO SINGLE PHASE
H	THREE PHASE TO SIX PHASE
G	THREE PHASE TO THREE PHASE
P	THREE PHASE TO TWELVE PHASE
F	THREE PHASE TO TWO PHASE
E	TWO PHASE TO SIX PHASE
D	TWO PHASE TO THREE PHASE
C	TWO PHASE TO TWO PHASE

Table 8 - WINDING SHIELDING METHODS

WINDING SHIELDING METHODS

REPLY CODE	REPLY (AC18)
AB	CORE GROUNDED
AC	CORE GROUNDED AND BROUGHT OUT TO TERMINAL
AD	CORE GROUNDED TO INCLOSURE
AE	CORE GROUNDED TO INCLOSURE AND BROUGHT OUT TO TERMINAL
AF	CORE GROUNDED TO SECONDARY TERMINAL
AG	EXTERNAL INCLOSURE
AH	EXTERNAL INCLOSURE CONNECTED TO TERMINAL
AJ	EXTERNAL INCLOSURE GROUNDED AND BROUGHT OUT TO TERMINAL
AK	EXTERNALLY GROUNDED AND BROUGHT OUT TO TERMINAL
AL	GROUND BROUGHT OUT TO TERMINAL
AM	GROUNDED TO CORE AND MOUNTING
AQ	GROUNDED TO INCLOSURE AND BROUGHT OUT TO TERMINAL
AN	GROUNDED TO INCLOSURE, CORE AND BROUGHT OUT TO TERMINAL
AP	GROUNDED TO INCLOSURE, CORE AND MOUNTING
AR	INCLOSURE GROUNDED
AS	INTERNAL SHIELD BROUGHT OUT TO CABLE SHIELD
AT	INTERNAL SHIELD BROUGHT OUT TO TERMINAL
AW	INTERNAL SHIELD CONNECTED TO SECONDARY TERMINAL
AX	INTERNAL SHIELD EXTERNALLY CONNECTED TO SECONDARY CENTER TAP
AY	INTERNAL SHIELD GROUNDED TO CORE
AZ	INTERNAL SHIELD GROUNDED TO CORE AND BROUGHT OUT TO TERMINAL
BA	INTERNAL SHIELD GROUNDED TO CORE AND MOUNTING
BB	INTERNAL SHIELD GROUNDED TO INCLOSURE
BC	INTERNAL SHIELD GROUNDED TO INCLOSURE AND BROUGHT OUT TO TERMINAL
BD	INTERNAL SHIELD GROUNDED TO INCLOSURE AND CORE
BE	INTERNAL SHIELD GROUNDED TO INCLOSURE AND CORE AND BROUGHT OUT TO TERMINAL
BF	INTERNAL SHIELD GROUNDED TO INCLOSURE AND SECONDARY CENTER

REPLY CODE	REPLY (AC18)
	TAP
BG	INTERNAL SHIELD GROUNDED TO MOUNTING
BH	INTERNAL SHIELD GROUNDED TO SECONDARY CENTER TAP
BJ	INTERNAL SHIELD GROUNDED TO TERMINAL
BK	INTERNALLY SHIELDED
BL	INTERNALLY SHIELDED AND BROUGHT OUT TO PRIMARY TERMINAL
BM	INTERNALLY SHIELDED GROUNDED TO CORE AND MOUNTING
BN	INTERNALLY SHIELDED GROUNDED TO MOUNTING
BP	PRIMARY AND SECONDARY SHIELDED AND BROUGHT OUT TO TERMINAL
BQ	PRIMARY SHIELD GROUNDED TO INCLOSURE AND SECONDARY SHIELD BROUGHT OUT TO TERMINAL
BR	SECONDARY GROUNDED TO INCLOSURE AND BROUGHT OUT TO TERMINAL

Table 9 - FEATURES PROVIDED

FEATURES PROVIDED

REPLY CODE	REPLY (AN47)
CNK	COLOR CODED LEAD
CNL	COLOR CODED TERMINAL
CNH	LEFT HAND WOUND COIL
CCS	PROTECTIVE COVER
CNJ	RIGHT HAND WOUND COIL
FNY	ROHS DIRECTIVE COMPLIANCE
BRP	SPECIAL MARKING
CAR	TINNED WIRE LEADS
CND	W/ARRESTOR
CNE	W/CAPACITOR
CNF	W/OVERLOAD PROTECTION
CNG	W/RECTIFIER
BZA	W/RESISTOR
AXJ	W/SWITCH

Table 10 - NONDEFINITIVE SPEC/STD DATA

NONDEFINITIVE SPEC/STD DATA

REPLY CODE	REPLY (AD08)
AL	ALLOY
AN	ANNEX
AP	APPENDIX
AC	APPLICABILITY CLASS
AR	ARRANGEMENT
AS	ASSEMBLY
AB	ASSORTMENT
BX	BOX
CY	CAPACITY

REPLY CODE	REPLY (AD08)
CA	CASE
CT	CATEGORY
CL	CLASS
CE	CODE
CR	COLOR
CC	COMBINATION CODE
CN	COMPONENT
CP	COMPOSITION
CM	COMPOUND
CD	CONDITION
CS	CONSTRUCTION
DE	DESIGN
DG	DESIGNATOR
DW	DRAWING NUMBER
EG	EDGE
EN	END
FY	FAMILY
FG	FIGURE
FN	FINISH
FM	FORM
FA	FORMULA
GR	GRADE
GP	GROUP
BA	IMAGE COLOR
NS	INSERT
TM	ITEM
KD	KIND
KT	KIT
LG	LENGTH
LT	LIMIT
MK	MARK
AA	MARKER
ML	MATERIAL
BB	MAXIMUM DENSITY
MH	MESH
ME	METHOD
BC	MINIMUM DENSITY
MD	MODEL
MT	MOUNTING
NR	NUMBER
PT	PART
PN	PATTERN
PC	PHYSICAL CONDITION
PS	PIECE
PL	PLAN
PR	POINT
QA	QUALITY
RN	RANGE

REPLY CODE	REPLY (AD08)
RT	RATING
RF	REFERENCE NUMBER
SC	SCHEDULE
SB	SECTION
SL	SELECTION
SE	SERIES
SV	SERVICE
SX	SET
SA	SHADE
SH	SHAPE
SG	SHEET
SZ	SIZE
PZ	SPECIES
SQ	SPECIFICATION SHEET
SD	SPEED
ST	STYLE
SS	SUBCLASS
SF	SUBFORM
SP	SUBTYPE
SN	SURFACE CONDITION
SY	SYMBOL
SM	SYSTEM
TB	TABLE
TN	TANNAGE
TP	TEMPER
TX	TEXTURE
TK	THICKNESS
TT	TREATMENT
TR	TRIM
TY	TYPE
YN	UNIT
VA	VARIETY
WT	WEIGHT
WD	WIDTH

Table 11 - PRECIOUS MATERIAL

PRECIOUS MATERIAL

REPLY CODE	REPLY (MA01)
AUA000	GOLD
IRA000	IRIDIUM
AZA000	OSMIUM
PDA000	PALLADIUM
PTA000	PLATINUM
RHA000	RHODIUM
RTA000	RUTHENIUM
AGA000	SILVER

Table 12 - HAZARDOUS LOCATIONS/ENVIRONMENTAL PROTECTION

HAZARDOUS LOCATIONS/ENVIRONMENTAL PROTECTION

REPLY CODE	REPLY (AB27)
AA	ACID RESISTANT
BN	AIRTIGHT
FG	ALKALI RESISTANT
AB	CEMENT TIGHT
ED	CORROSION PROOF
DJ	CORROSION RESISTANT
CG	DRIPPROOF
FS	DRIPTIGHT
EF	DUST RESISTANT
CF	DUSTPROOF
DY	DUSTTIGHT
CE	EXPLOSION PROOF
FQ	EXPLOSION RESISTANT
FD	FIRE RESISTANT
FE	FIREPROOF
DN	FLAME RESISTANT
GF	FLAMEPROOF
DP	FUEL RESISTANT
DK	FUNGUS PROOF
CH	FUNGUS RESISTANT
AP	GENERAL PURPOSE-NEMA TYPE 1
GE	HUMIDITY RESISTANT
EC	LEAKTIGHT
CP	LIQUID TIGHT
DV	MOISTURE PROOF
BR	MOISTURE RESISTANT
DW	OIL RESISTANT
CJ	OILTIGHT
CK	RAINPROOF
EM	RAINTIGHT
GC	SALT SPRAY PROOF
FZ	SALT SPRAY RESISTANT
DT	SALT WATER RESISTANT
BT	SPLASHPROOF
CL	SPRAYTIGHT
DZ	SUBMERSIBLE
EK	VAPOR PROOF
ES	VAPORTIGHT
AT	VAPORTIGHT, GASTIGHT
FM	VIBRATION PROOF
GB	VIBRATION RESISTANT
EA	WATER RESISTANT
CM	WATERPROOF

REPLY CODE	REPLY (AB27)
CN	WATERTIGHT
EG	WEATHER RESISTANT
DX	WEATHERPROOF
GG	WEATHERTIGHT

Table 13 - TRANSFORMER WINDING CONNECTION TYPES

TRANSFORMER WINDING CONNECTION TYPES

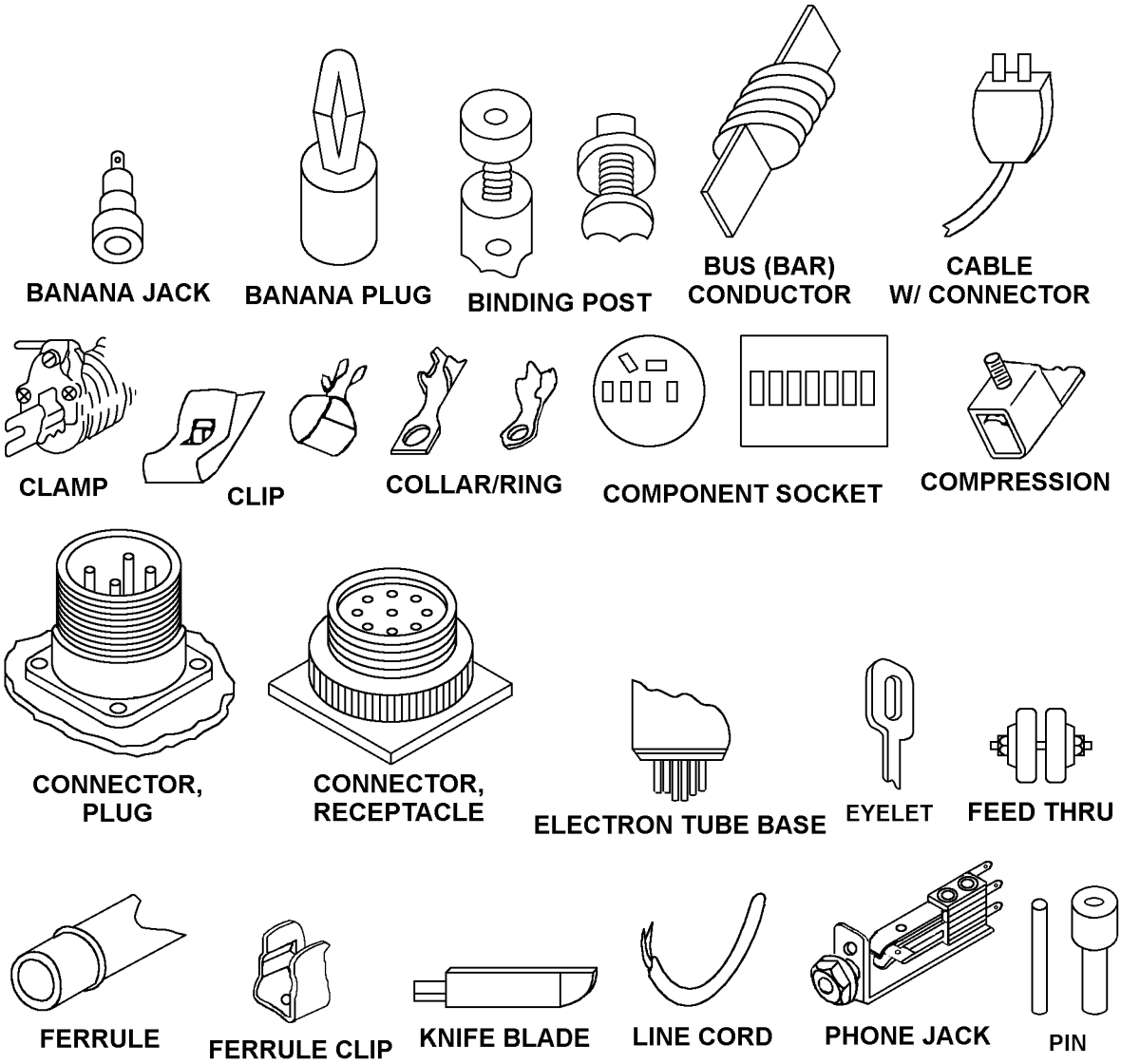
REPLY CODE	REPLY (AE08)
B	DELTA-DELTA
C	DELTA-WYE
E	OPEN DELTA-OPEN DELTA (V connected)
L	OPEN DELTA-WYE
F	SCOTT
G	TAYLOR
H	WYE-DELTA
M	WYE-DELTA-WYE
J	WYE-OPEN DELTA
K	WYE-WYE

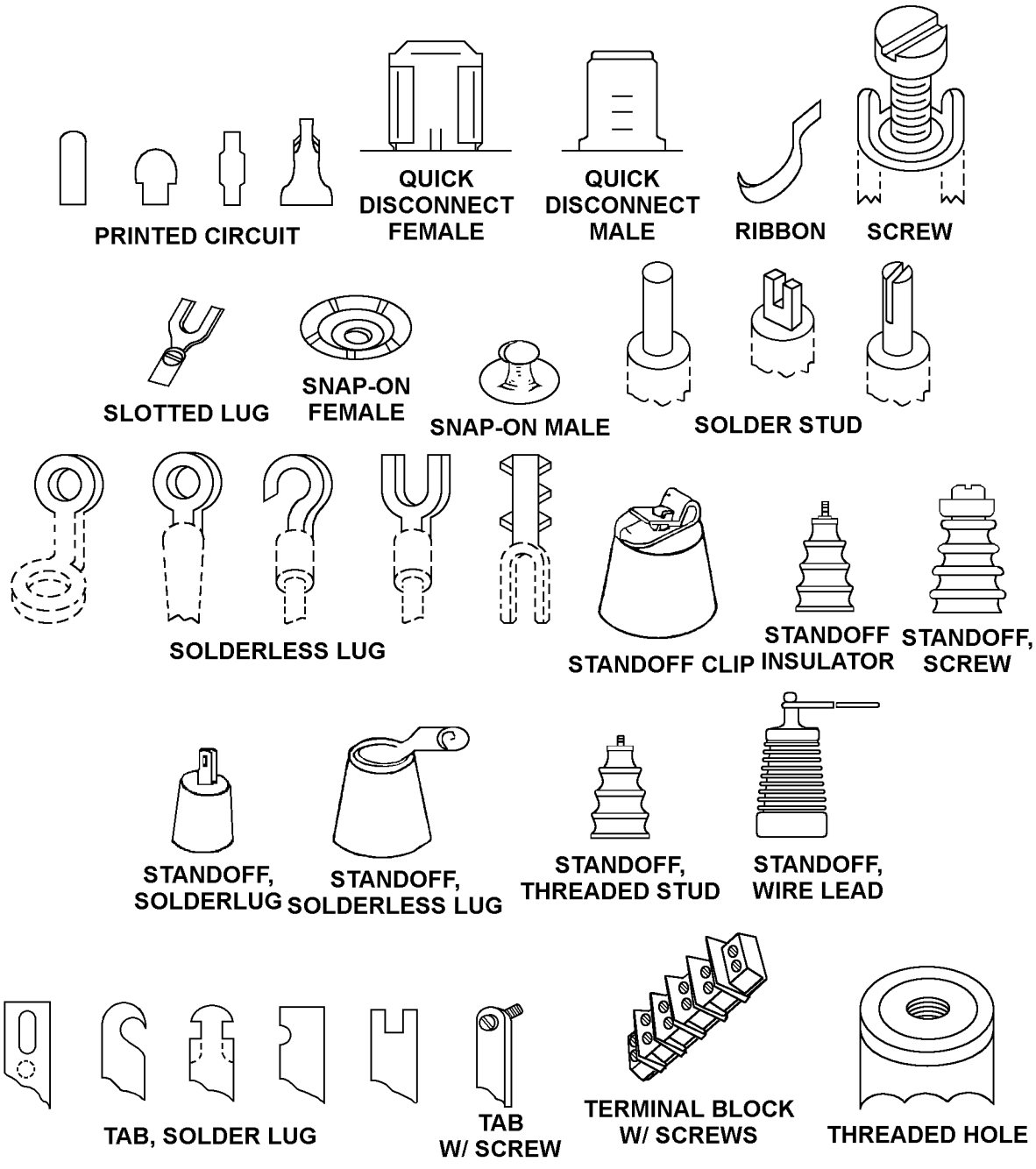
Reference Drawing Groups

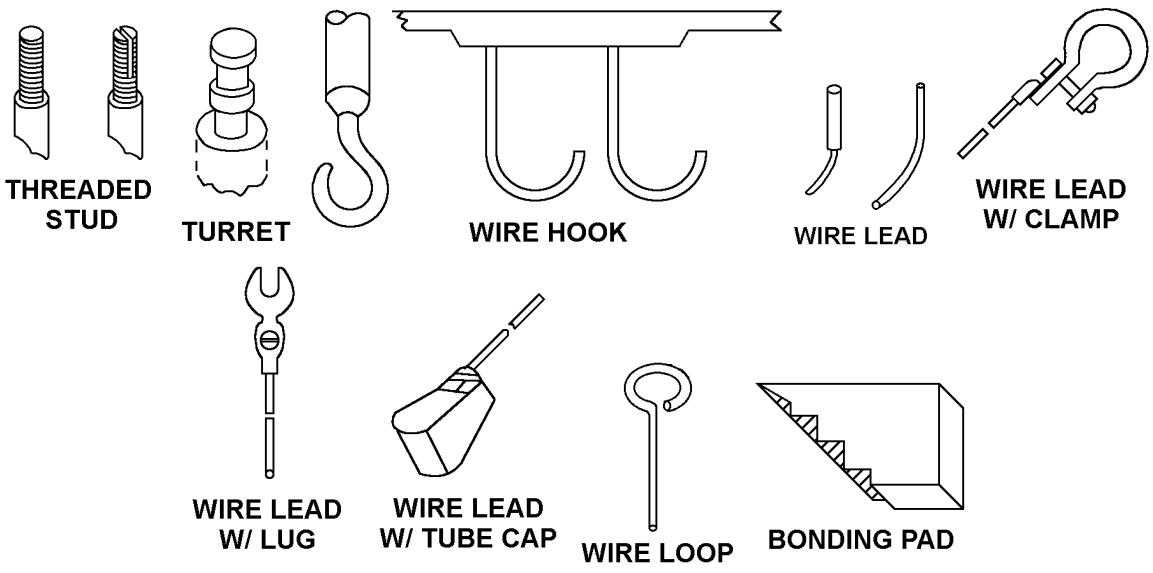
REFERENCE DRAWING GROUP A

TERMINAL TYPES

(No Requirements)



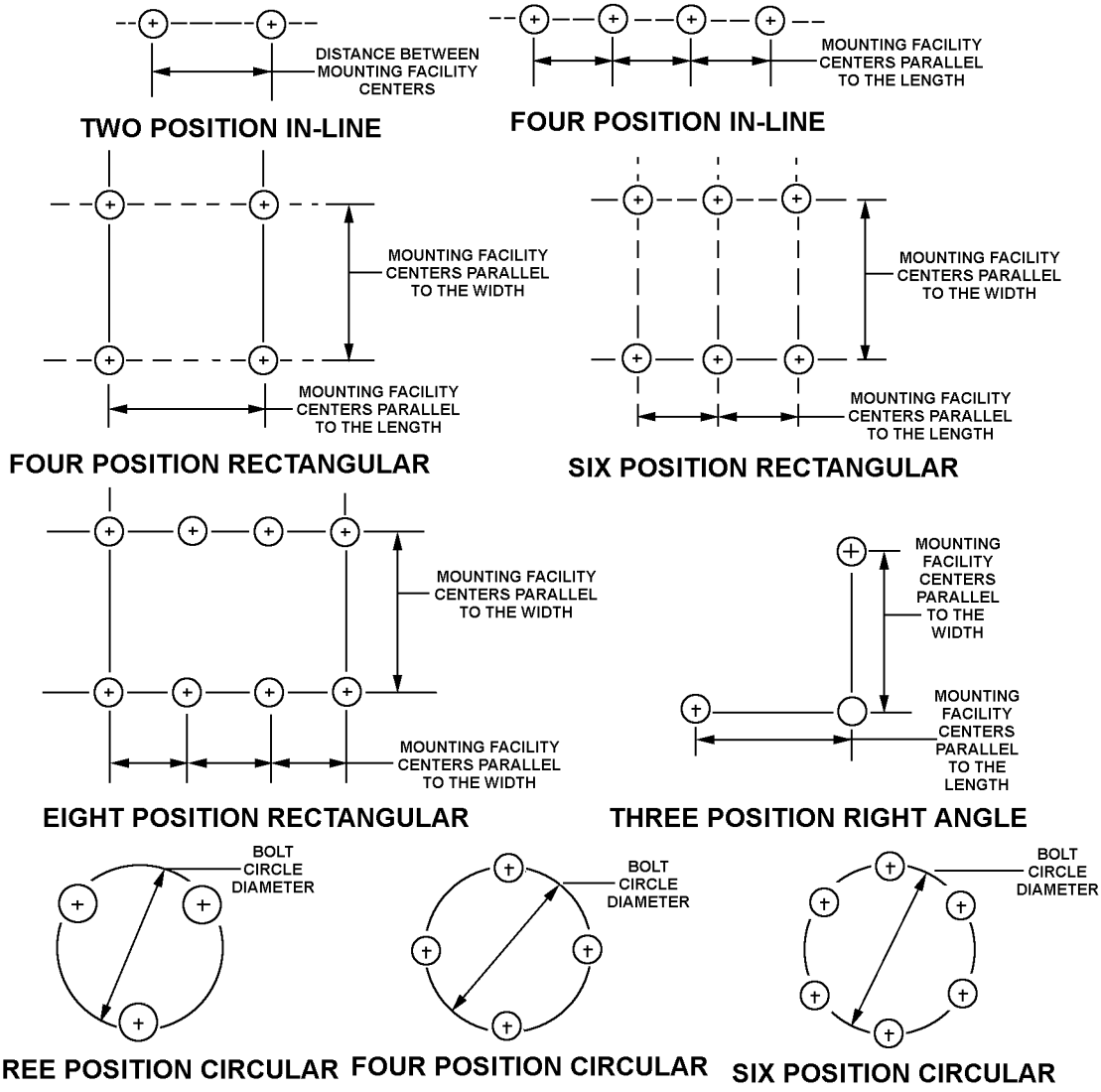

PRINTED CIRCUIT
QUICK DISCONNECT FEMALE
QUICK DISCONNECT MALE
RIBBON
SCREW
SLOTTED LUG
SNAP-ON FEMALE
SNAP-ON MALE
SOLDER STUD
SOLDERLESS LUG
STANDOFF CLIP
STANDOFF INSULATOR
STANDOFF, SCREW
STANDOFF, SOLDERLUG
STANDOFF, SOLDERLESS LUG
STANDOFF, THREADED STUD
STANDOFF, WIRE LEAD
TAB, SOLDER LUG
TAB W/ SCREW
TERMINAL BLOCK W/ SCREWS
THREADED HOLE

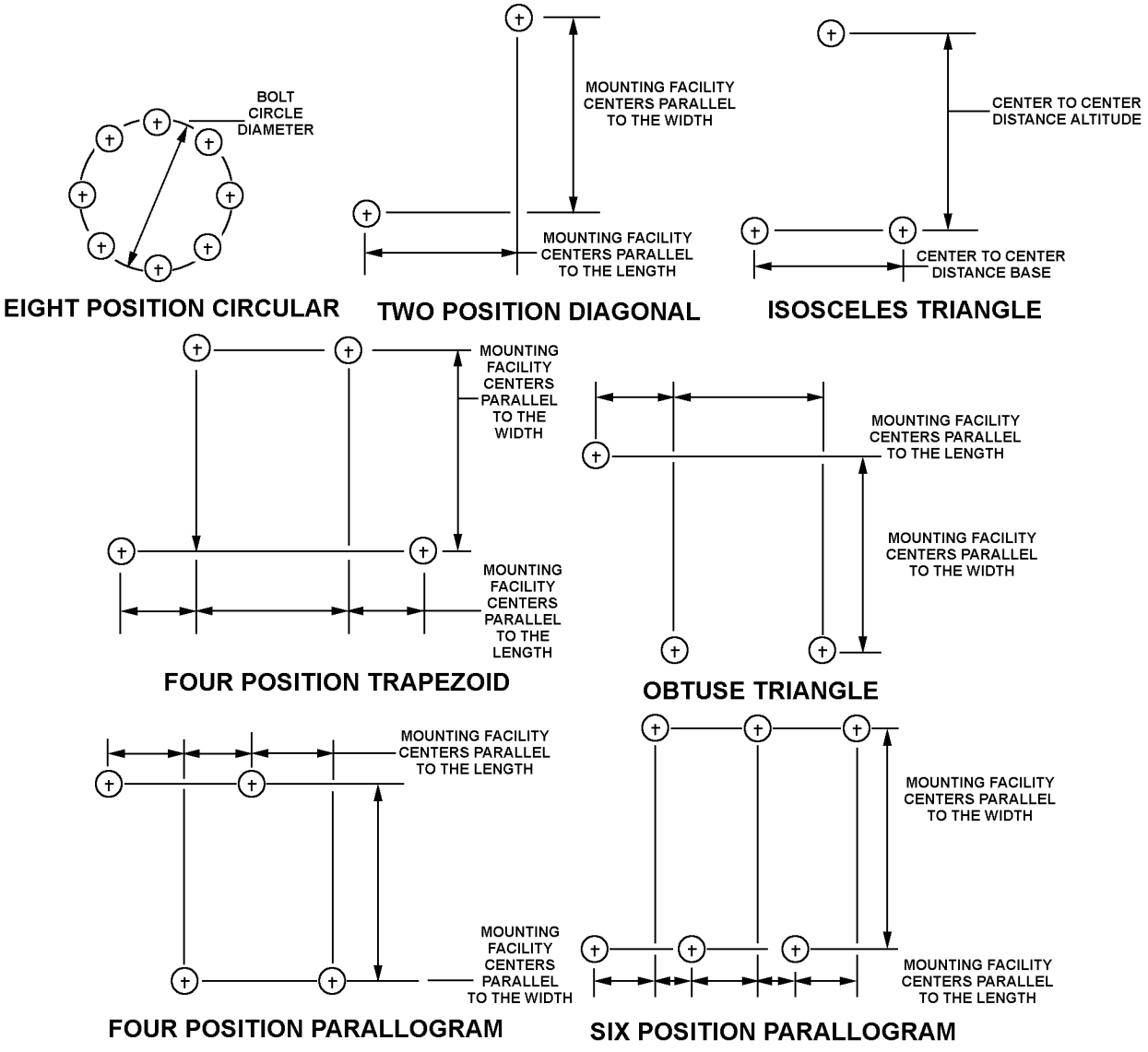

THREADED STUD
TURRET
WIRE HOOK
WIRE LEAD
WIRE LEAD W/ CLAMP
WIRE LEAD W/ LUG
WIRE LEAD W/ TUBE CAP
WIRE LOOP
BONDING PAD

REFERENCE DRAWING GROUP B

MOUNTING PATTERNS

(No Requirements)

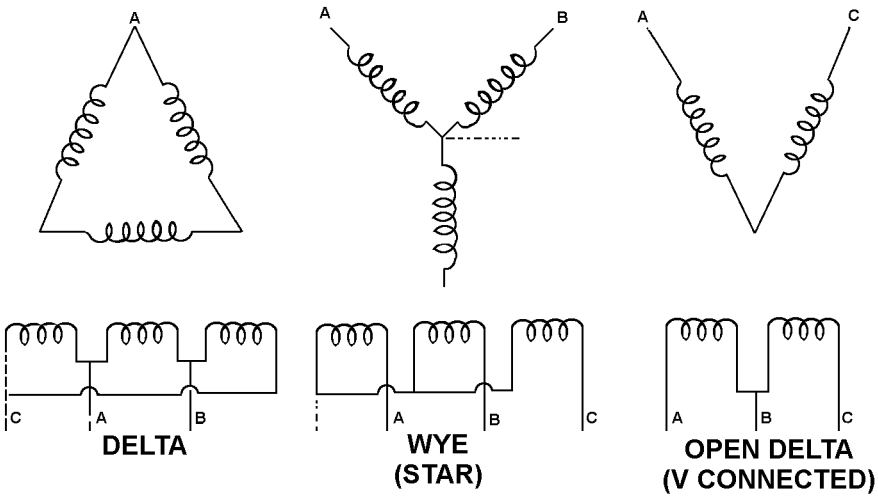



BOLT CIRCLE DIAMETER
MOUNTING FACILITY CENTERS PARALLEL TO THE WIDTH
MOUNTING FACILITY CENTERS PARALLEL TO THE LENGTH
CENTER TO CENTER DISTANCE ALTITUDE
CENTER TO CENTER DISTANCE BASE
EIGHT POSITION CIRCULAR
TWO POSITION DIAGONAL
ISOSCELES TRIANGLE
MOUNTING FACILITY CENTERS PARALLEL TO THE WIDTH
MOUNTING FACILITY CENTERS PARALLEL TO THE LENGTH
FOUR POSITION TRAPEZOID
MOUNTING FACILITY CENTERS PARALLEL TO THE LENGTH
MOUNTING FACILITY CENTERS PARALLEL TO THE WIDTH
OBTUSE TRIANGLE
MOUNTING FACILITY CENTERS PARALLEL TO THE LENGTH
MOUNTING FACILITY CENTERS PARALLEL TO THE WIDTH
FOUR POSITION PARALLOGRAM
MOUNTING FACILITY CENTERS PARALLEL TO THE WIDTH
MOUNTING FACILITY CENTERS PARALLEL TO THE LENGTH
SIX POSITION PARALLOGRAM

REFERENCE DRAWING GROUP D

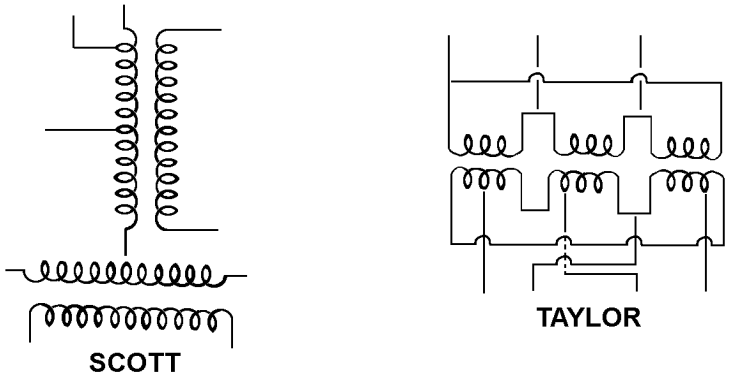
WINDING CONNECTION - INTERNAL

(No Requirements)



The above schematics illustrate three different types of windings used in a two or three phase transformer. The lower schematic is an electrically identical representation of the schematic above it. Two of the above winding types, in any combination, constitute a transformer described in Appendix A, Table 13. (e.g., DELTA-DELTA, WYE-OPEN DELTA)

Internally connected transformers are designed so the the tapped sections cannot be separated without causing damage to the transformer.

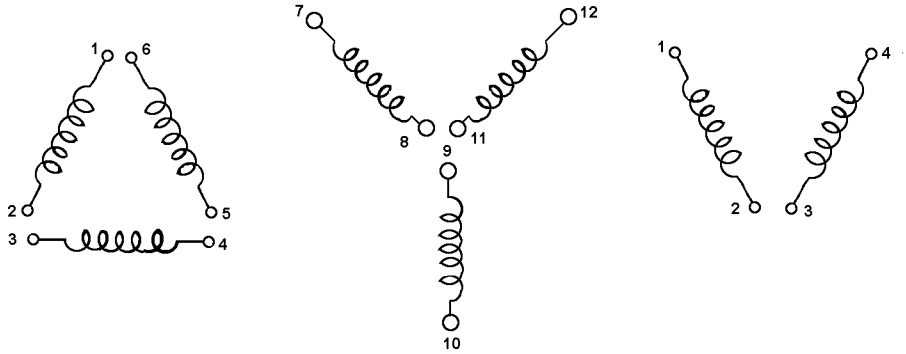


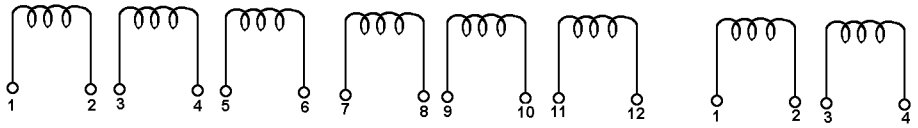
WINDING CONNECTION - EXTERNAL

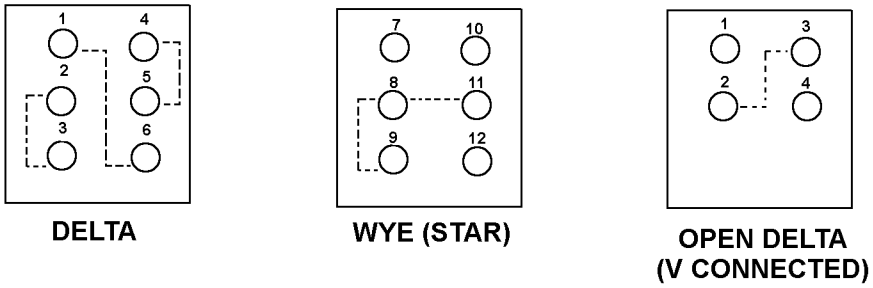
(No Requirements)

The schematics below illustrate items designed to be externally connected. The broken lines on

the terminal board represent jumper wires that may be connected to form a particular type of winding (DELTA, WYE).





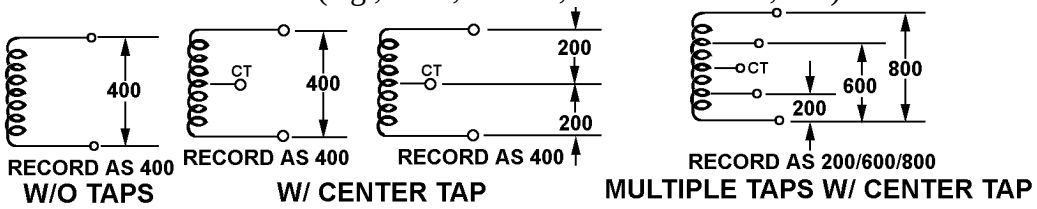


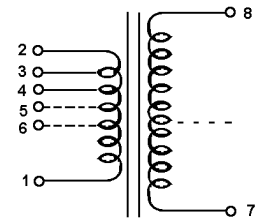
REFERENCE DRAWING GROUP E

RATING DETERMINATION

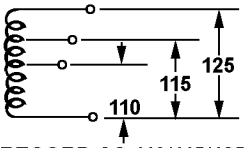
(No Requirements)

The following instructions are to establish procedures for recording ratings of windings with or without taps. The values apply to any characteristic, depending upon the characteristic being identified (e.g., volts, current, D.C. resistance, etc.).





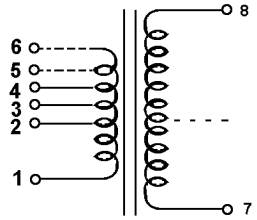
PRIMARY SECONDARY



RECORD AS 110/115/125

MULTIPLE TAPS W/O CENTER TAP

PRIMARY		SECONDARY
TERMINAL	VOLTAGE	VOLTAGE
1 - 2	115	12600
1 - 3	115	13300
1 - 4	115	15000



PRIMARY SECONDARY

MULTIPLE TAPS

PRIMARY		SECONDARY
TERMINAL	VOLTAGE	VOLTAGE
1 - 2	105	15000
1 - 3	115	15000
1 - 4	125	15000

REFERENCE DRAWING GROUP F Tables
ITEM ORIENTATION INSTRUCTIONS

Items with Single Mounting Surfaces:

ILLUSTRATION NUMBER 1 indicates the surfaces from which the dimensions are taken when a noncylindrical item has a Single Mounting Surface.

ILLUSTRATION NUMBERS 2 through 15 are examples of items having a Single Mounting Surface.

Items with Two or More Mounting Surfaces:

ILLUSTRATION NUMBERS 16, 17, and 18 are examples of items other than cylindrical shape having more than one mounting surface. Dimensions will be recorded as follows: 1. The greatest dimension is length.2. The intermediate dimension is width.3. The smallest dimension is height.

Items Without a Reference Mounting Surface:

For an item other than cylindrical shape for which the mounting surface(s) cannot be determined, record dimensions as follows: 1. The greatest dimension is length.2. The intermediate dimension is width.3. The smallest dimension is height.

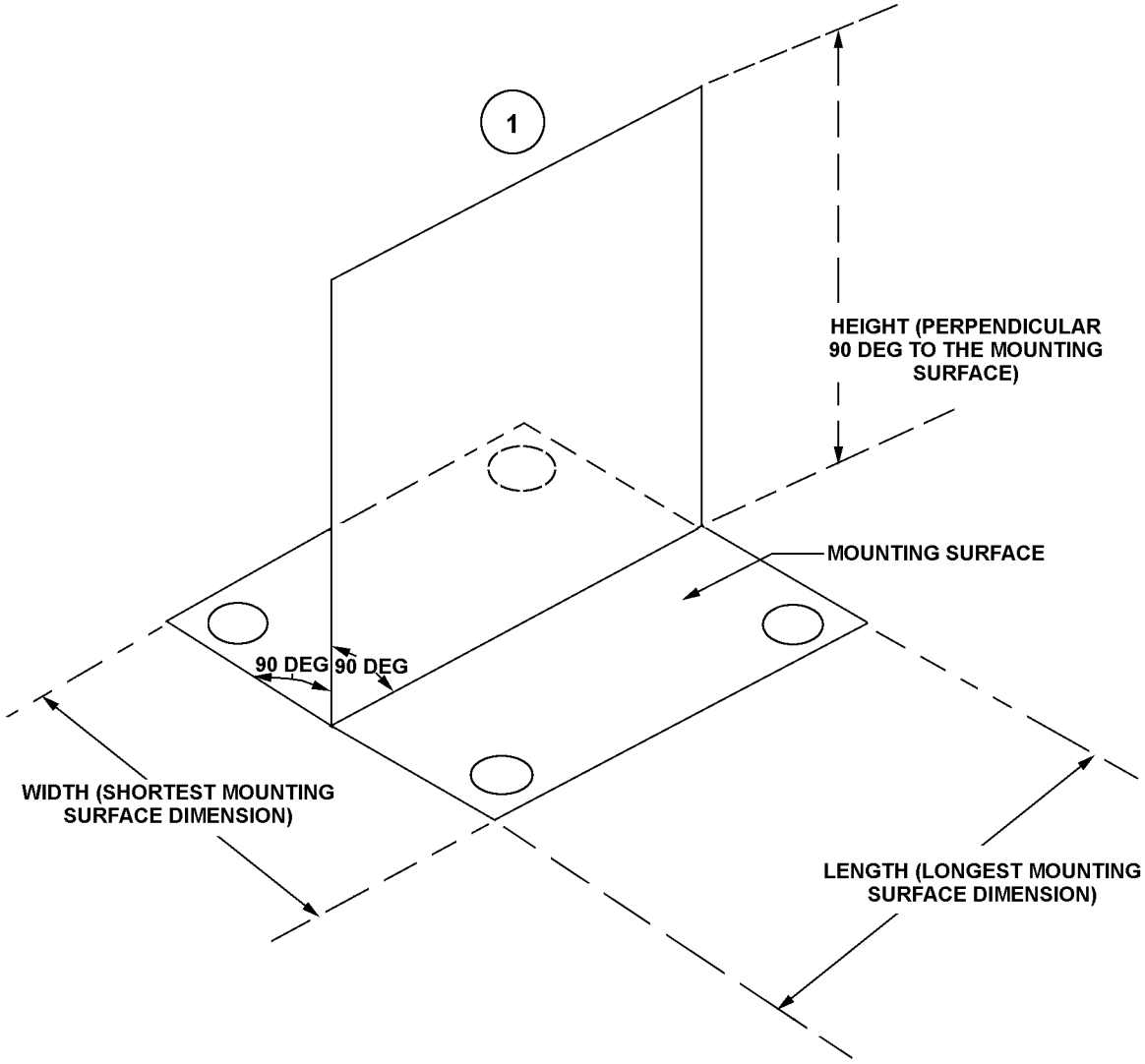
Cylindrical Items:

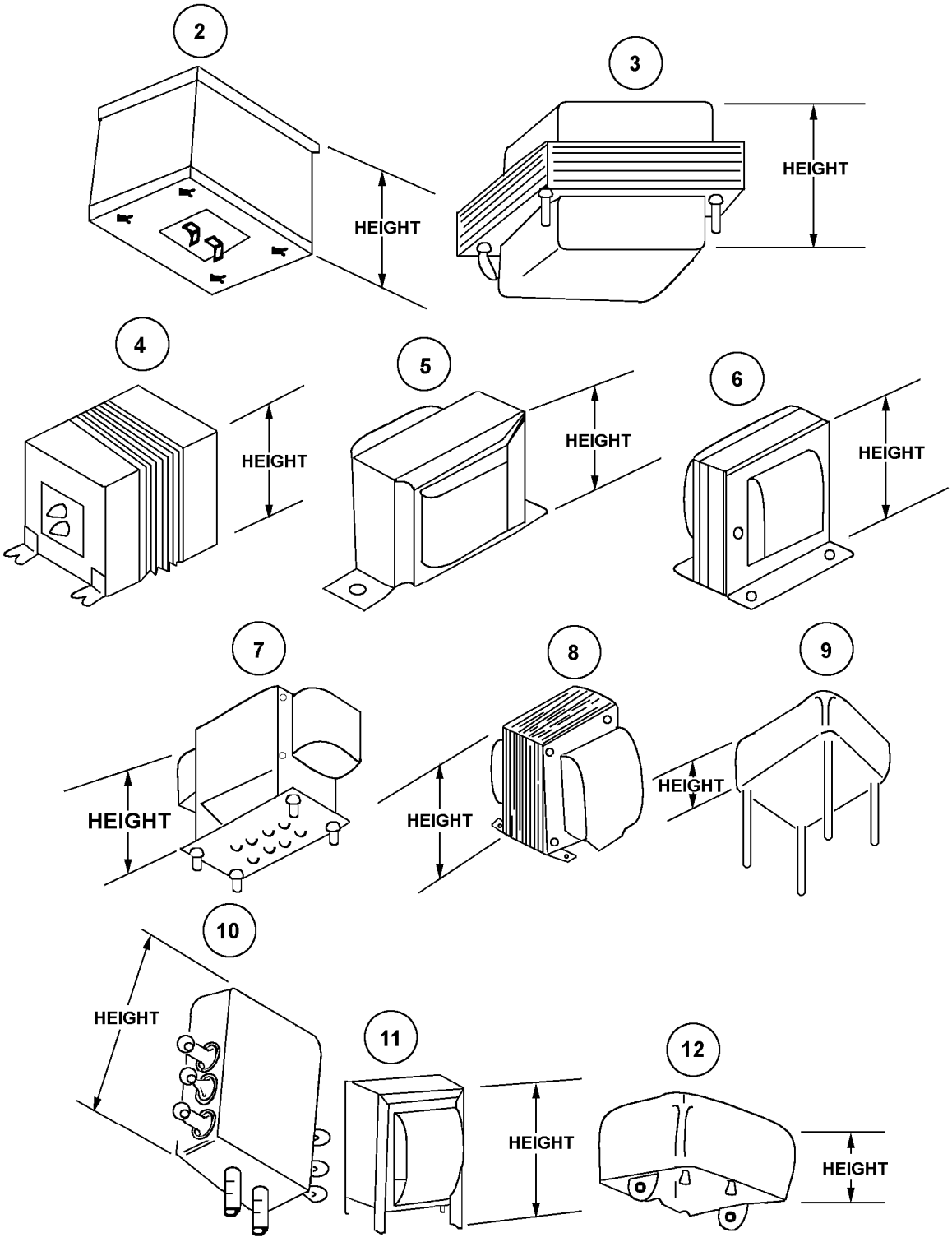
Cylindrical shape item dimensions will be recorded as length and diameter.

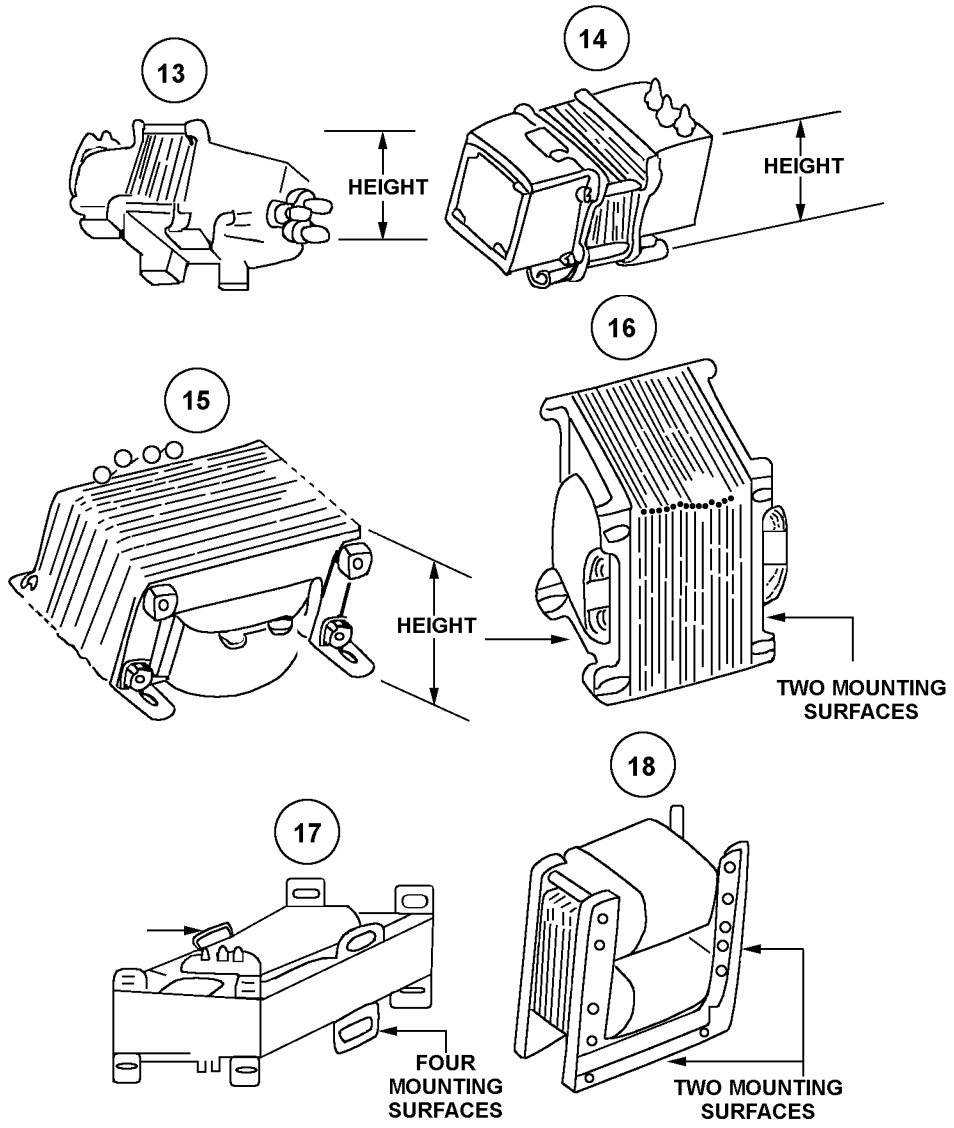
REFERENCE DRAWING GROUP F

ITEM ORIENTATION ILLUSTRATIONS

ILLUSTRATION BELOW INDICATES THE POINT AT WHICH DIMENSIONS WILL BE DETERMINED WHEN ITEM HAS A SINGLE MOUNTING SURFACE




2
HEIGHT
3
HEIGHT
4
HEIGHT
5
HEIGHT
6
HEIGHT
7
HEIGHT
8
HEIGHT
9
HEIGHT
10
HEIGHT
11
HEIGHT
12
HEIGHT


13
HEIGHT
14
HEIGHT
15
HEIGHT
16
TWO MOUNTING SURFACES
17
FOUR MOUNTING SURFACES
18
TWO MOUNTING SURFACES

Technical Data Tables

STANDARD FRACTION TO DECIMAL CONVERSION CHART

4ths	8ths	16ths	32nds	64ths	To 3	To 4	4ths	8ths	16ths	32nds	64ths	To 3	To 4
				1/64	.016	.0156					33/64	.516	.5156
			1/32	-----	.031	.0312				17/32	------	.531	.5312
				3/64	.047	.0469					35/64	.547	.5469
		1/16	-----		.062	.0625			9/16	-----	-----	.562	.5625
				5/64	.078	.0781					37/64	.578	.5781
			3/32	-----	.094	.0938				19/32	------	.594	.5938
				7/64	.109	.1094					39/64	.609	.6094
	1/8	-----	-----	-----	.125	.1250		5/8	-----	-----	-----	.625	.6250
				9/64	.141	.1406					41/64	.641	.6406
			5/32	-----	.156	.1562				21/32	------	.656	.6562
				11/64	.172	.1719					43/64	.672	.6719
		3/16	-----	-----	.188	.1875			11/16	-----	-----	.688	.6875
				13/64	.203	.2031					45/64	.703	.7031
			7/32	------	.219	.2188				23/32	------	.719	.7188
				15/64	.234	.2344					47/64	.734	.7344
1/4	-----	-----	-----	-----	.250	.2500	3/4	-----	-----	-----	-----	.750	.7500
				17/64	.266	.2656					49/64	.766	.7656
			9/32	------	.281	.2812				25/32	------	.781	.7812
				19/64	.297	.2969					51/64	.797	.7969
		5/16	-----	-----	.312	.3125			13/16	-----	-----	.812	.8125
				21/64	.328	.3281					53/64	.828	.8281
			11/32	------	.344	.3438				27/32	------	.844	.8438
				23/64	.359	.3594					55/64	.859	.8594
	3/8	-----	-----	-----	.375	.3750		7/8	-----	-----	-----	.875	.8750
				25/64	.391	.3906					57/64	.891	.8906
			13/32	------	.406	.4062				29/32	------	.906	.9062
				27/64	.422	.4219					59/64	.922	.9219
		7/16	-----	-----	.438	.4375			15/16	-----	-----	.938	.9375
				29/64	.453	.4531					61/64	.953	.9531
			15/32	------	.469	.4688				31/32	------	.969	.9688
				31/64	.484	.4844					63/64	.984	.9844
					.500	.5000						1.000	1.0000

METRIC CONVERSION CHART

ORIGINAL VALUE		DESIRED VALUE															
Prefix		Tera	Giga	Mega	Myria	Kilo	Hecto	Deke	*Unit	Deci	Centi	Milli	Micro	Nano	Pico	Femto	Atto
	Power of 10	10 12	10 9	106	104	10 3	102	101	100	10-1	10-2	10-3	10-6	10-9	12-12	10-15	10-18
Tera	1012		3|ad	6|ad	8|ad	9|ad	10|ad	11|ad	12|ad	13|ad	14|ad	15|ad	18|ad	21|ad	24|ad	27|ad	30|ad
Giga	109	|aj3		3|ad	5|ad	6|ad	7|ad	8|ad	9|ad	10|ad	11|ad	12|ad	15|ad	18|ad	21|ad	24|ad	27|ad
Mega	106	|aj6	|aj3		2|ad	3|ad	4|ad	5|ad	6|ad	7|ad	8|ad	9|ad	12|ad	15|ad	18|ad	21|ad	24|ad
Myria	104	|aj8	|aj5	|aj2		1|ad	2|ad	3|ad	4|ad	5|ad	6|ad	7|ad	10|ad	13|ad	16|ad	19|ad	22|ad
Kilo	103	|aj9	|aj6	|aj3	|aj1		1|ad	2|ad	3|ad	4|ad	5|ad	6|ad	9|ad	12|ad	15|ad	18|ad	21|ad
Hecto	102	|aj10	|aj7	|aj4	|aj2	|aj1		1|ad	2|ad	3|ad	4|ad	5|ad	8|ad	11|ad	14|ad	17|ad	20|ad
Deka	101	|aj11	|aj8	|aj5	|aj3	|aj2	|aj1		1|ad	2|ad	3|ad	4|ad	7|ad	10|ad	13|ad	16|ad	19|ad
*Unit	100	|aj12	|aj9	|aj6	|aj4	|aj3	|aj2	|aj1		1|ad	2|ad	3|ad	6|ad	9|ad	12|ad	15|ad	18|ad
Deci	10-1	|aj13	|aj10	|aj7	|aj5	|aj4	|aj3	|aj2	|aj1		1|ad	2|ad	5|ad	8|ad	11|ad	14|ad	17|ad
Centi	10-2	|aj14	|aj11	|aj8	|aj6	|aj5	|aj4	|aj3	|aj2	|aj1		1|ad	4|ad	7|ad	10|ad	13|ad	16|ad
Milli	10-3	|aj15	|aj12	|aj9	|aj7	|aj6	|aj5	|aj4	|aj3	|aj2	|aj1		3|ad	6|ad	9|ad	12|ad	15|ad
Micro	10-6	|aj18	|aj15	|aj12	|aj10	|aj9	|aj8	|aj7	|aj6	|aj5	|aj4	|aj3		3|ad	6|ad	9|ad	12|ad
Nano	10-9	|aj21	|aj18	|aj15	|aj13	|aj12	|aj11	|aj10	|aj9	|aj8	|aj7	|aj6	|aj3		3|ad	6|ad	9|ad
Pico	10-12	|aj24	|aj21	|aj18	|aj16	|aj15	|aj14	|aj13	|aj12	|aj11	|aj10	|aj9	|aj6	|aj3		3|ad	6|ad
Femto	10-15	|aj27	|aj24	|aj21	|aj19	|aj18	|aj17	|aj16	|aj15	|aj14	|aj13	|aj12	|aj9	|aj6	|aj3		3|ad
Atto	10-18	|aj30	|aj27	|aj24	|aj22	|aj21	|aj20	|aj19	|aj18	|aj17	|aj16	|aj15	|aj12	|aj9	|aj6	|aj3	

* The notation "unit" represents the basic unit of measurement, such as amperes, farads, grams, hertz, meters, ohms, volts, watts, etc.

To convert from one notation (metric or a power of ten) to another, locate the original or given value in the left-hand column. Follow this line horizontally to the vertical column headed by the desired notation. The figure and arrow at the intersection of these two columns indicates the direction and number of places the decimal point is to be moved (e.g., to convert 25,000 kilohertz to megahertz, at the intersection of the horizontal column for kilo and the vertical column for mega find the figure and directional arrow |aj3. Thus, shifting the decimal in 25,000 kilohertz 3 places to the left results in the value of 25 megahertz).

STUD SIZE CONVERSION TABLE

STUD SIZE ACCOMMODATED	STUD DIAMETER	(MRC ABTB) MOUNTING HOLE DIAMETER	(MRC ABTD) MOUNTING SLOT WIDTH
2	0.086	0.090	0.090
4	0.112	0.116	0.116
6	0.138	0.143	0.143
8	0.164	0.169	0.169
10	0.190	0.196	0.196
1/4	0.250	0.262	0.262
5/16	0.312	0.323	0.323
3/8	0.375	0.388	0.388
7/16	0.438	0.453	0.453
1/2	0.500	0.516	0.516
5/8	0.625	0.650	0.650
3/4	0.750	0.775	0.775

DECIMAL EQUIVALENTS FOR VARIOUS WIRE GAGES

Gage No.	AWG or B&S Inches	SWG Inches	MWG Milli- meters
0000000		.50000	

Gage No.	AWG or B&S Inches	SWG Inches	MWG Milli- meters
000000	.58000	.46400	
00000	.51650	.43200	
0000	.46000	.40000	
000	.40960	.37200	
00	.36480	.34800	
0	.32490	.32400	
0.5			0.05
1	.28930	.30000	0.10
1.2			0.12
1.4			0.14
1.5			0.15
1.6			0.16
1.8			0.18
2	.25760	.27600	0.20
2.5			0.25
3	.22940	.25200	0.30
3.5			0.35
4	.20430	.23200	0.40
4.5			0.45
5	.18190	.21200	0.50
6	.16200	.19200	0.60
7	.14430	.7600	0.70
8	.12850	.16000	0.80
9	.11440	.14400	0.90
10	.10190	.12800	1.00
11	.09074	.11600	
12	.08081	.10400	1.20
13	.07196	.09200	
14	.06408	.08000	1.40
15	.05707	.07200	
16	.05082	.06400	1.60
17	.04526	.05600	
18	.04030	.04800	1.80
19	.03589	.04000	
20	.03196	.03600	2.00
21	.02846	.03200	
22	.02535	.02800	
23	.02257	.02400	
24	.02010	.02200	

Gage No.	AWG or B&S Inches	SWG Inches	MWG Milli- meters
25	.01790	.02000	2.50
26	.01594	.01800	
27	.01420	.01640	
28	.01264	.01480	
29	.01126	.01360	
30	.01003	.01240	3.00
31	.00893	.01160	
32	.00795	.01080	
33	.00708	.01000	
34	.00631	.00920	
35	.00562	.00840	3.50
36	.00500	.00760	
37	.00445	.00680	
38	.00397	.00600	
39	.00353	.00520	
40	.00315	.00480	4.00
41	.00280	.00440	
42	.00249	.00400	
43	.00222	.00360	
44	.00198	.00320	
45	.00176	.00280	4.50
46	.00157	.00240	
47	.00140	.00200	
48	.00124	.00160	
49	.00111	.00120	
50	.00099	.00100	
60			6.00
70			7.00
80			8.00
90			9.00
100			10.00

OUNCE TO DECIMAL OF A POUND CONVERSION CHART

OUNCES	POUNDS
1	0.062
2	0.125

OUNCES	POUNDS
3	0.188
4	0.250
5	0.312
6	0.375
7	0.438
8	0.500
9	0.562
10	0.625
11	0.688
12	0.750
13	0.812
14	0.875
15	0.938
16	1.000

THREAD SIZE/SERIES

Nominal Size and Threads Per Inch	Thread Series
0-80 OR .060-80	UNF
1-64 OR .073-64	UNC
1-72 OR .073-72	UNF
2-56 OR .086-56	UNC
2-64 OR .086-64	UNF
3-48 OR .099-48	UNC
3-56 OR .099-56	UNF
4-40 OR .112-40	UNC
4-48 OR .112-48	UNF
5-40 OR .125-40	UNC
5-44 OR .125-44	UNF
6-32 OR .138-32	UNC
6-40 OR .138-40	UNF
8-32 OR .164-32	UNC
8-36 OR .164-36	UNF
10-24 OR .190-24	UNC
10-28 OR .190-28	UNS
10-32 OR .190-32	UNF
10-36 OR .190-36	UNS
10-40 OR .190-40	UNS
10-48 OR .190-48	UNS
10-56 OR .190-56	UNS
12-24 OR .216-24	UNC
12-28 OR .216-28	UNF

12-32 OR .216-32	UNEF
12-36 OR .216-36	UNS
12-40 OR .216-40	UNS
12-48 OR .216-48	UNS
12-56 OR .216-56	UNS
1/4-20 OR .250-20	UNC
1/4-24 OR .250-24	UNS
1/4-27 OR .250-27	UNS
1/4-28 OR .250-28	UNF
1/4-32 OR .250-32	UNEF
1/4-36 OR .250-36	UNS
1/4-40 OR .250-40	UNS
1/4-48 OR .250-48	UNS
1/4-56 OR .250-56	UNS
5/16-18 OR .3125-18	UNC
5/16-20 OR .3125-20	UN
5/16-24 OR .3125-24	UNF
5/16-27 OR .3125-27	UNS
5/16-28 OR .3125-28	UN
5/16-32 OR .3125-32	UNEF
5/16-36 OR .3125-36	UNS
5/16-40 OR .3125-40	UNS
5/16-48 OR .3125-48	UNS
3/8-16 OR .375-16	UNC
3/8-18 OR .375-18	UNS
3/8-20 OR .375-20	UN
3/8-24 OR .375-24	UNF
3/8-27 OR .375-27	UNS
3/8-28 OR .375-28	UN
3/8-32 OR .375-32	UNEF
3/8-36 OR .375-36	UNS
3/8-40 OR .375-40	UNS
.390-27	UNS
7/16-14 OR .4375-14	UNC
7/16-16 OR .4375-16	UN
7/16-18 OR .4375-18	UNS
7/16-20 OR .4375-20	UNF
7/16-24 OR .4375-24	UNS
7/16-27 OR .4375-27	UNS
7/16-28 OR .4375-28	UNEF
7/16-32 OR .4375-32	UN
7/16-36 OR .4375-36	UNS
7/16-40 OR .4375-40	UNS
1/2-12 OR .500-12	UNS
1/2-13 OR .500-13	UNC
1/2-14 OR .500-14	UNS

1/2-16 OR .500-16	UN
1/2-18 OR .500-18	UNS
1/2-20 OR .500-20	UNF
1/2-24 OR .500-24	UNS
1/2-27 OR .500-27	UNS
1/2-28 OR .500-28	UNEF
1/2-32 OR .500-32	UN
1/2-36 OR .500-36	UNS
1/2-40 OR .500-40	UNS
9/16-12 OR .5625-12	UNC
9/16-14 OR .5625-14	UNS
9/16-16 OR .5625-16	UN
9/16-18 OR .5625-18	UNF
9/16-20 OR .5625-20	UN
9/16-24 OR .5625-24	UNEF
9/16-27 OR .5625-27	UNS
9/16-28 OR .5625-28	UN
9/16-32 OR .5625-32	UN
9/16-36 OR .5625-36	UNS
9/16-40 OR .5625-40	UNS
5/8-11 OR .625-11	UNC
5/8-12 OR .625-12	UN
5/8-14 OR .625-14	UNS
5/8-16 OR .625-16	UN
5/8-18 OR .625-18	UNF
5/8-24 OR .625-24	UNEF
5/8-27 OR .625-27	UNS
5/8-28 OR .625-28	UN
5/8-32 OR .625-32	UN
5/8-36 OR .625-36	UNS
11/16-12 OR .6875-12	UN
11/16-16 OR .6875-16	UN
11/16-20 OR .6875-20	UN
11/16-24 OR .6875-24	UNEF
11/16-28 OR .6875-28	UN
11/16-32 OR .6875-32	UN
3/4-10 OR .750-10	UNC
3/4-12 OR .750-12	UN
3/4-14 OR .750-14	UNS
3/4-16 OR .750-16	UNF
3/4-18 0R .750-18	UNS
3/4-20 OR .750-20	UNEF
3/4-24 OR .750-24	UNS
3/4-27 OR .750-27	UNS
3/4-28 OR .750-28	UN
3/4-32 OR .750-32	UN

3/4-36 OR .750-36	UNS
3/4-40 OR .750-40	UNS
13/16-12 OR .8125-12	UN
13/16-16 OR .8125-16	UN
13/16-20 OR .8125-20	UNEF
13/16-28 OR .8125-28	UN
13/16-32 OR .8125-32	UN
7/8-9 OR .875-9	UNC
7/8-10 OR .875-10	UNS
7/8-12 OR .875-12	UN
7/8-14 OR .875-14	UNF
7/8-16 OR .875-16	UN
7/8-18 OR .875-18	UNS
7/8-20 OR .875-20	UNEF
7/8-24 OR .875-24	UNS
7/8-27 OR .875-27	UNS
7/8-28 OR .875-28	UN
7/8-32 OR .875-32	UN
7/8-36 OR .875-36	UNS
7/8-40 OR .875-40	UNS
15/16-12 OR .9375-12	UN
15/16-16 OR .9375-16	UN
15/16-20 OR .9375-20	UNEF
15/16-28 OR .9375-28	UN
15/16-32 OR .9375-32	UN
1-8 OR 1.000-8	UNC
1-10 OR 1.000-10	UNS
1-12 OR 1.000-12	UNF
1-14 OR 1.000-14	UNS
1-16 OR 1.000-16	UN
1-18 OR 1.000-18	UNS
1-20 OR 1.000-20	UNEF
1-24 OR 1.000-24	UNS
1-27 OR 1.000-27	UNS
1-28 OR 1.000-28	UN
1-32 OR 1.000-32	UN
1-36 OR 1.000-36	UNS
1-40 OR 1.000-40	UNS
1 1/16-8 OR 1.0625-8	UN
1 1/16-12 OR 1.0625-12	UN
1 1/16-16 OR 1.0625-16	UN
1 1/16-18 OR 1.0625-18	UNEF
1 1/16-20 OR 1.0625-20	UN
1 1/16-28 OR 1.0625-28	UN
1 1/8-7 OR 1.125-7	UNC
1 1/8-8 OR 1.125-8	UN

1 1/8-10 OR 1.125-10	UNS
1 1/8-12 OR 1.125-12	UNF
1 1/8-14 OR 1.125-14	UNS
1 1/8-16 OR 1.125-16	UN
1 1/8-18 OR 1.125-18	UNEF
1 1/8-20 OR 1.125-20	UN
1 1/8-24 OR 1.125-24	UNS
1 1/8-28 OR 1.125-28	UN
1 3/16-8 OR 1.188-8	UN
1 3/16-12 OR 1.188-12	UN
1 3/16-16 OR 1.188-16	UN
1 3/16-18 OR 1.188-18	UNEF
1 3/16-20 OR 1.188-20	UN
1 3/16-28 OR 1.188-28	UN
1 1/4-7 OR 1.250-7	UNC
1 1/4-8 OR 1.250-8	UN
1 1/4-10 OR 1.250-10	UNS
1 1/4-12 OR 1.250-12	UNF
1 1/4-14 OR 1.250-14	UNS
1 1/4-16 OR 1.250-16	UN
1 1/4-18 OR 1.250-18	UNEF
1 1/4-20 OR 1.250-20	UN
1 1/4-24 OR 1.250-24	UNS
1 1/4-28 OR 1.250-28	UN
1 5/16-8 OR 1.312-8	UN
1 5/16-12 OR 1.312-12	UN
1 5/16-16 OR 1.312-16	UN
1 5/16-18 OR 1.312-18	UNEF
1 5/16-20 OR 1.312-20	UN
1 5/16-28 OR 1.312-28	UN
1 3/8-6 OR 1.375-6	UNC
1 3/8-8 OR 1.375-8	UN
1 3/8-10 OR 1.375-10	UNS
1 3/8-12 OR 1.375-12	UNF
1 3/8-14 OR 1.375-14	UNS
1 3/8-16 OR 1.375-16	UN
1 3/8-18 OR 1.375-18	UNEF
1 3/8-20 OR 1.375-20	UN
1 3/8-24 OR 1.375-24	UNS
1 3/8-28 OR 1.375-28	UN
1 7/16-6 OR 1.4375-6	UN
1 7/16-8 OR 1.438-8	UN
1 7/16-12 OR 1.438-12	UN
1 7/16-16 OR 1.438-16	UN
1 7/16-18 OR 1.438-18	UNEF
1 7/16-20 OR 1.438-20	UN

1 7/16-28 OR 1.438-28	UN
1 1/2-6 OR 1.500-6	UNC
1 1/2-8 OR 1.500-8	UN
1 1/2-10 OR 1.500-10	UNS
1 1/2-12 OR 1.500-12	UNF
1 1/2-14 OR 1.500-14	UNS
1 1/2-16 OR 1.500-16	UN
1 1/2-18 OR 1.500-18	UNEF
1 1/2-20 OR 1.500-20	UN
1 1/2-24 OR 1.500-24	UNS
1 1/2-28 OR 1.500-28	UN
1 9/16-6 OR 1.562-6	UN
1 9/16-8 OR 1.562-8	UN
1 9/16-12 OR 1.562-12	UN
1 9/16-16 OR 1.562-16	UN
1 9/16-18 OR 1.562-18	UNEF
1 9/16-20 OR 1.562-20	UN
1 5/8-6 OR 1.625-6	UN
1 5/8-8 OR 1.625-8	UN
1 5/8-10 OR 1.625-10	UNS
1 5/8-12 OR 1.625-12	UN
1 5/8-14 OR 1.625-14	UNS
1 5/8-16 OR 1.625-16	UN
1 5/8-18 OR 1.625-18	UNEF
1 5/8-20 OR 1.625-20	UN
1 5/8-24 OR 1.625-24	UNS
1 11/16-6 OR 1.688-6	UN
1 11/16-8 OR 1.688-8	UN
1 11/16-12 OR 1.688-12	UN
1 11/16-16 OR 1.688-16	UN
1 11/16-18 OR 1.688-18	UNEF
1 11/16-20 OR 1.688-20	UN
1 3/4-5 OR 1.750-5	UNC
1 3/4-6 OR 1.750-6	UN
1 3/4-8 OR 1.750-8	UN
1 3/4-10 OR 1.750-10	UNS
1 3/4-12 OR 1.750-12	UN
1 3/4-14 OR 1.750-14	UNS
1 3/4-16 OR 1.750-16	UN
1 3/4-20 OR 1.750-20	UN
1 13/16-6 OR 1.812-6	UN
1 13/16-8 OR 1.812-8	UN
1 13/16-12 OR 1.812-12	UN
1 13/16-16 OR 1.812-16	UN
1 13/16-20 OR 1.812-20	UN
1 7/8-6 OR 1.875-6	UN

1 7/8-8 OR 1.875-8	UN
1 7/8-10 OR 1.875-10	UNS
1 7/8-12 OR 1.875-12	UN
1 7/8-14 OR 1.875-14	UNS
1 7/8-16 OR 1.875-16	UN
1 7/8-18 OR 1.875-18	UNS
1 7/8-20 OR 1.875-20	UN
1 15/16-6 OR 1.938-6	UN
1 15/16-8 OR 1.938-8	UN
1 15/16-12 OR 1.938-12	UN
1 15/16-16 OR 1.938-16	UN
1 15/16-20 OR 1.938-20	UN
2-4 1/2 OR 2.000-4.5	UNC
2-6 OR 2.000-6	UN
2-8 OR 2.000-8	UN
2-10 OR 2.000-10	UN
2-12 OR 2.000-12	UN
2-14 OR 2.000-14	UNS
2-16 OR 2.000-16	UN
2-18 OR 2.000-18	UNS
2-20 OR 2.000-20	UN
2 1/16-16 OR 2.062-16	UNS
2 1/8-6 OR 2.125-6	UN
2 1/8-8 OR 2.125-8	UN
2 1/8-12 OR 2.125-12	UN
2 1/8-16 OR 2.125-16	UN
2 1/8-20 OR 2.125-20	UN
2 3/16-16 OR 2.188-16	UNS
2 1/4-4 1/2 OR 2.250-4.5	UNC
2 1/4-6 OR 2.250-6	UN
2 1/4-8 OR 2.250-8	UN
2 1/4-10 OR 2.250-10	UNS
2 1/4-12 OR 2.250-12	UN
2 1/4-14 OR 2.250-14	UN
2 1/4-16 OR 2.250-16	UN
2 1/4-18 OR 2.250-18	UNS
2 1/4-20 OR 2.250-20	UN
2 5/16-16 OR 2.312-16	UNS
2 3/8-6 OR 2.375-6	UN
2 3/8-8 OR 2.375-8	UN
2 3/8-12 OR 2.375-12	UN
2 3/8-16 OR 2.375-16	UN
2 3/8-20 OR 2.375-20	UN
2 7/16-16 OR 2.438-16	UNS
2 1/2-4 OR 2.500-4	UNC
2 1/2-6 OR 2.500-6	UN

2 1/2-8 OR 2.500-8	UN
2 1/2-10 OR 2.500-10	UNS
2 1/2-12 OR 2.500-12	UN
2 1/2-14 OR 2.500-14	UNS
2 1/2-16 OR 2.500-16	UN
2 1/2-18 OR 2.500-18	UNS
2 1/2-20 OR 2.500-20	UN
2 5/8-6 OR 2.625-6	UN
2 5/8-8 OR 2.625-8	UN
2 5/8-12 OR 2.625-12	UN
2 5/8-16 OR 2.625-16	UN
2 5/8-20 OR 2.625-20	UN
2 3/4-4 OR 2.750-4	UNC
2 3/4-6 OR 2.750-6	UN
2 3/4-8 OR 2.750-8	UN
2 3/4-10 OR 2.750-10	UNS
2 3/4-12 OR 2.750-12	UN
2 3/4-14 OR 2.750-14	UNS
2 3/4-16 OR 2.750-16	UN
2 3/4-18 OR 2.750-18	UNS
2 3/4-20 OR 2.750-20	UN
2 7/8-6 OR 2.875-6	UN
2 7/8-8 OR 2.875-8	UN
2 7/8-12 OR 2.875-12	UN
2 7/8-16 OR 2.875-16	UN
2 7/8-20 OR 2.875-20	UN
3-4 OR 3.000-4	UNC
3-6 OR 3.000-6	UN
3-8 OR 3.000-8	UN
3-10 OR 3.000-10	UNS
3-12 OR 3.000-12	UN
3-14 OR 3.000-14	UNS
3-16 OR 3.000-16	UN
3-18 OR 3.000-18	UNS
3-20 OR 3.000-20	UN
3 1/8-6 OR 3.125-6	UN
3 1/8-8 OR 3.125-8	UN
3 1/8-12 OR 3.125-12	UN
3 1/8-16 OR 3.125-16	UN
3 1/4-4 OR 3.250-4	UNC
3 1/4-6 OR 3.250-6	UN
3 1/4-8 OR 3.250-8	UN
3 1/4-10 OR 3.250-10	UNS
3 1/4-12 OR 3.250-12	UN
3 1/4-14 OR 3.250-14	UNS
3 1/4-16 OR 3.250-16	UN

3 1/4-18 OR 3.250-18	UNS
3 3/8-6 OR 3.375-6	UN
3 3/8-8 OR 3.375-8	UN
3 3/8-12 OR 3.375-12	UN
3 3/8-16 OR 3.375-16	UN
3 1/2-4 OR 3.500-4	UNC
3 1/2-6 OR 3.500-6	UN
3 1/2-8 OR 3.500-8	UN
3 1/2-10 OR 3.500-10	UNS
3 1/2-12 OR 3.500-12	UN
3 1/2-14 OR 3.500-14	UNS
3 1/2-16 OR 3.500-16	UN
3 1/2-18 OR 3.500-18	UNS
3 5/8-6 OR 3.625-6	UN
3 5/8-8 OR 3.625-8	UN
3 5/8-12 OR 3.625-12	UN
3 5/8-16 OR 3.625-16	UN
3 3/4-4 OR 3.750-4	UNC
3 3/4-6 OR 3.750-6	UN
3 3/4-8 OR 3.750-8	UN
3 3/4-10 OR 3.750-10	UNS
3 3/4-12 OR 3.750-12	UN
3 3/4-14 OR 3.750-14	UNS
3 3/4-16 OR 3.750-16	UN
3 3/4-18 OR 3.750-18	UNS
3 7/8-6 OR 3.875-6	UN
3 7/8-8 OR 3.875-8	UN
3 7/8-12 OR 3.875-12	UN
3 7/8-16 OR 3.875-16	UN
4-4 OR 4.000-4	UNC
4-6 OR 4.000-6	UN
4-8 OR 4.000-8	UN
4-10 OR 4.000-10	UNS
4-12 OR 4.000-12	UN
4-14 OR 4.000-14	UNS
4-16 OR 4.000-16	UN
4 1/8-4 OR 4.125-4	UN
4 1/8-12 OR 4.125-12	UN
4 1/8-16 OR 4.125-16	UN
4 1/4-4 OR 4.250-4	UN
4 1/4-6 OR 4.250-6	UN
4 1/4-10 OR 4.250-10	UNS
4 1/4-12 OR 4.250-12	UN
4 1/4-14 OR 4.250-14	UNS
4 1/4-16 OR 4.250-16	UN
4 3/8-6 OR 4.375-6	UN

4 3/8-12 OR 4.375-12	UN
4 3/8-16 OR 4.375-16	UN
4 1/2-4 OR 4.500-4	UN
4 1/2-6 OR 4.500-6	UN
4 1/2-10 OR 4.500-10	UNS
4 1/2-12 OR 4.500-12	UN
4 1/2-14 OR 4.500-14	UNS
4 1/2-16 OR 4.500-16	UN
4 5/8-6 OR 4.625-6	UN
4 5/8-12 OR 4.625-12	UN
4 5/8-16 OR 4.625-16	UN
4 3/4-4 OR 4.750-4	UN
4 3/4-6 OR 4.750-6	UN
4 3/4-10 OR 4.750-10	UNS
4 3/4-12 OR 4.750-12	UN
4 3/4-14 OR 4.750-14	UNS
4 3/4-16 OR 4.750-16	UN
4 7/8-6 OR 4.875-6	UN
4 7/8-12 OR 4.875-12	UN
4 7/8-16 OR 4.875-16	UN
5-4 OR 5.000-4	UN
5-8 OR 5.000-8	UN
5-10 OR 5.000-10	UNS
5-12 OR 5.000-12	UN
5-14 OR 5.000-14	UNS
5-16 OR 5.000-16	UN
5 1/8-12 OR 5.125-12	UN
5 1/8-16 OR 5.125-16	UN
5 1/4-4 OR 5.250-4	UN
5 1/4-10 OR 5.250-10	UNS
5 1/4-12 OR 5.250-12	UN
5 1/4-14 OR 5.250-14	UNS
5 1/4-16 OR 5.250-16	UN
5 3/8-12 OR 5.375-12	UN
5 3/8-16 OR 5.375-16	UN
5 1/2-4 OR 5.500-4	UN
5 1/2-10 OR 5.500-10	UNS
5 1/2-12 OR 5.500-12	UN
5 1/2-14 OR 5.500-14	UNS
5 1/2-16 OR 5.500-16	UN
5 5/8-12 OR 5.625-12	UN
5 3/4-4 OR 5.750-4	UN
5 5/8-16 OR 5.625-16	UN
5 3/4-4 OR 5.750-4	UN
5 3/4-10 OR 5.750-10	UNS
5 3/4-12 OR 5.750-12	UN

5 3/4-14 OR 5.750-14	UNS
5 3/4-16 OR 5.750-16	UN
5 7/8-12 OR 5.875-12	UN
5 7/8-16 OR 5.875-16	UN
6-4 OR 6.000-4	UN
6-10 OR 6.000-10	UNS
6-12 OR 6.000-12	UN
6-14 OR 6.000-14	UNS
6-16 OR 6.000-16	UN

ISO METRIC SCREW THREAD SIZE/THREAD PITCH *

SIZE IN MM	PITCH IN MM		
(BASIC MAJOR DIAMETER)	ISO-M		ISO-S
COARSE	FINE	COARSE	
0.25	----	----	0.075
0.3	----	----	0.08
0.35	----	----	0.09
0.4	----	----	0.1
0.45	----	----	0.1
0.5	----	----	0.125
0.55	----	----	0.125
0.6	----	----	0.15
0.7	----	----	0.175
0.8	----	----	0.2
0.9	----	----	0.225
1.0	----	----	0.25
1.1	----	----	0.25
1.2	----	----	0.25
1.4	----	----	0.30
1.6	----	----	0.35
1.8	----	----	0.35
2.0	----	----	0.40
2.2	----	----	0.45
2.5	----	----	0.45
3.0	----	----	0.50
3.5	----	----	0.60
4.0	----	----	0.70
4.5	----	----	0.75
5.0	----	----	0.80
6.0	1.00	----	----
7.0	1.00	----	----

8.0	1.25	1.00	----
10.0	1.50	1.25	----
12.0	1.75	1.25	----
14.0	2.00	1.50	----
16.0	2.00	1.50	----
18.0	2.50	1.50	----
20.0	2.50	1.50	----
22.0	2.50	1.50	----
24.0	3.00	2.00	----
27.0	3.00	2.00	----
30.0	3.50	2.00	----
33.0	3.50	2.00	----
36.0	4.00	3.00	----
39.0	4.00	3.00	----

ISO METRIC THREADS ARE DESIGNATED BY A LETTER (M OR S), FOLLOWED BY THE SIZE AND PITCH IN MILLIMETERS, AS SHOWN BELOW. WHERE THERE IS NO INDICATION OF PITCH, THE COARSE PITCH IS IMPLIED.

EXAMPLES: M6X1 (INDICATES 6-MM DIAMETER, 1-MM PITCH); S2 (INDICATES 2-MM DIAMETER, COARSE (0.4) PITCH)

M6X1 (INDICATES 6-MM DIAMETER, 1-MM PITCH);

S2 (INDICATES 2-MM DIAMETER, COARSE (0.4) PITCH)

* Adapted from SCREW THREAD STANDARDS FOR FEDERAL SERVICES (1957), Handbook H28, Part III, Table 14.2.

FIIG Change List

FIIG Change List, Effective March 5, 2010

Deleted MRC ECAT

Revised note to MRC ALAX.

Added reply code NR- REVIEWED - DOES NOT MEET SOME ENAC CRITERIA to MRC ENAC.